THE PLANNED OBSOLESCENCE OF LANGUAGE

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THE PLANNED OBSOLESCENCE OF LANGUAGE

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Table of contents:

FOREWORD: DEAD MEN'S UTOPIAS……...…..3
PREFACE: THE PLANNED OBSOLESCENCE OF LANGUAGE……..19
1. Dark side of language
2. Necessity of obsolescence
3. Semantic equilibrium
4. Miscommunication axiom
5. Language of wisdom and folly
1. ORIGIN OF SPEECH…….…….97
1.1. Talking ape
1.2. Collective fictions
1.3. Social imagination
2. EVOLUTION OF LANGUAGE……125
2.1. Evolution of speech
2.2. Rise and fall of language
2.3. Moral progress
3. GENESIS THEORIES……151
3.1. Gregory Bateson
3.2. Daniel Dor
3.3. Robin Dunbar
3.4. Daniel Everett
4. LINGUISTIC THEORIES……..178
4.1. From logos to langue
4.2. Death of the text
4.3. Universal grammar
5. PARADIGMS OF COMMUNICATION……203
5.1. Power and control
5.2. Deception and manipulation
5.3. Paradigm change

Foreword: DEAD MEN'S UTOPIAS 9130

'All the power of the first three decades of the twentieth century had lain in the word. There had been hardly a speech, a book, a newspaper article, or a lecture that had not contained some kind of prophecy. But none of them came true'.
— Elias Canetti, Crowds and Power

'The language of totalitarian regimes is, by its nature, contaminated: full of clichés, slogans, and mechanical repetition. It is a language that prevents thinking'.
— George Steiner, Language and Silence

'Every word in political language has a slippery, variable meaning. Words like freedom, democracy, and justice are not definable by reference to any fixed reality'.
— George Orwell, Politics and the English Language

'The ruling ideas of each age have ever been the ideas of its ruling class'.
— Karl Marx and Friedrich Engels, The German Ideology

Dusty bookcases

The Faculty of Journalism and Mass Communication at Sofia University 'St. Kliment Ohridski' in Bulgaria is a beautiful 19th-century building next to the university botanical garden in the centre of Sofia. In 2014, when finishing my first book, 'The Economic Policy of Online Media, Manufacturing Dissent', I moved to a temporary new office due to a renovation. My 'new' office looked old with its bulky and dusty bookcases, their shelves stacked with books, magazines, old dissertations, and graduation theses. In a moment of procrastination and doubting the merits of my book, I decided to examine the inside of the oldest and dustiest bookcases. Except for the half-empty bottles from some academic parties, they were crowded with outdated ideology and propaganda. The dustier layer held numerous books from the era of the socialist People's Republic of Bulgaria, featuring the most luxurious editions published by the official publishers of the Bulgarian Communist Party. The most intriguing detail was that they could be easily classified ideologically by the years of the Communist Party Congresses in Bulgaria. You could trace the new party line with new plans and goals, the new enemies, and friends, and the emerging new subideologies with their new buzzwords and slogans. The newest books inside the bookcases were dated around 1989.

In 1990, the XIV Congress of the Bulgarian Communist Party took place, after which it changed its name to the Bulgarian Socialist Party. It was the end of the People's Republic. Some of the less dusty books on the shelves were published between 1990 and the present, spanning the thirty-four years of liberal democracy in the Republic of Bulgaria. After a glance at them, it turned out that you can also classify them according to the current trends in political ideologies since the 1990s. There were no official party publishing houses, but the political bias was

evident, and there was evident support from different grants and foundations, just to check your ideological compass. To be honest, my first thought was that my book would end up on these shelves one day, and I was right. After that, it occurred to me that the ideological language was not so different before and after 1990. The buzzwords, slogans, values, and beliefs were opposite in meaning, but the structure of persuasion and propaganda was similar. Even the names of some of the authors were the same. Switching sides after the fall of the Iron Curtain was natural. It is the most human thing to do. The ruling ideas are always the ideas of the ruling parties. The most published books are always the politically correct ones. If you want your books to be published over the years, you must rotate as a "political weathercock".

Publish and perish

But were the authors more honest before or after 1990? Or was it all like 'Havel's Greengrocer', writing slogans just for career development or even as a fashion? In his 1978 Harvard address, Aleksandr Solzhenitsyn critiqued[1] the West scientists for focusing excessively on career development, without moral responsibility to society: 'Legally, your researchers are free, but they are conditioned by the fashion of the day. There is no open violence, such as in the East; however, a selection dictated by fashion and the need to match mass standards frequently prevents independent-minded people from making their contribution to public life. There is a dangerous tendency to flock together and shut off successful development'. So, what is the difference between political bias in academic writing then and now? Today, you can also choose your research topic dictated by the fashion of political correctness and the need to match the standards of the ruling ideology. From a linguistic perspective, the concept of 'political correctness' appears to stem from the intention to avoid marginalising certain identity groups through language. The linguistic relativity hypothesis suggests that our thought processes shape our perception of reality and are, in turn, shaped by the language we use. This means that language not only reflects our worldview but also reveals and reinforces our implicit biases. The use of biased language perpetuates ill effects in the ideological group and must be censored or cancelled. In the bubble of the group speak the individual is indoctrinated as in a cult. Every ideological language has a performative effect on its user, even if he is just pretending. Buzzwords and slogans work even if you do not believe or even understand them.

Many of these "political weathercock" authors are gone, and their books will be forgotten. What will be the fate of these luxurious editions of books full of outdated dead men's utopias? You do not have to burn books to destroy a culture, just get people to stop reading them, says Ray Bradbury. You just take the old propaganda books off the shelves and pile them inside the bookcases. For sure, only a few people will read them, or only a few people will flip through. These books were part of the power structure of society and lost their meaning as this structure disintegrated. The ideas of the ruling parties suddenly become just an information waste. It is like a tower of books and words that holds the political system and then collapses. They become only a memory of a stillborn utopia. But why are new utopias so important for mankind? The books that are still on the shelves are using the same ideological language of propaganda, promising another bright future. In order to unite large groups of people, a common language must build utopias. It is like an inherent quality of every complex language. One utopia is not

[1] Solzhenitsyn, A. (1978). Aleksandr Solzhenitsyn Center — A World Split Apart. [online] Aleksandr Solzhenitsyn Center. Available at: https://www.solzhenitsyncenter.org/a-world-split-apart.

enough. It is always plural because the original utopia is upgraded with time and changes constantly. The coming new ideology must replace the old one. The failed promises must be replaced with new slogans and buzzwords. The old ones are buried under a heap of information waste. So, it is a constant building of castles made of words, which eventually melt into the sea of languages. As if the ideologies are made to break just to keep the concept of utopia alive. The stories clash and fade away, but the language is the same. Every ideological language has an inherent kill switch to destroy any creation myth or political philosophy if it poses a threat to the semantic equilibrium. Every complex system of words is reduced to an empty slogan that expires with time and needs to be forgotten and replaced. It is a constant cycle of new and new beliefs with short periods of disbelief. Periodical manufacture of consent and dissent. Communication is a condition for social life, along with miscommunication. Utopias turned into dystopias. Wisdom is followed by stupidity.

Nonsensical propositions

This latent dysfunction of speech and systemic distortion of communication can be called a planned obsolescence of language and is a premise for a proposed miscommunication axiom. The research on the planned obsolescence of language follows the tradition of the critique of language and the ideas of Fritz Mauthner and Ludwig Wittgenstein. It is not critical of the language itself as a tool for communication but of the use of ideological language as a political weapon for indoctrination, control, and domination. This type of linguistic weapon is penetrating all levels of human societies across the world. There is no great hope for future change and creation of a more just world information order. What is more foreseeable is that every dangerous idea and every ideological language anticipates its destruction. Wittgenstein put his faith in the inherent quality of complex language to create nonsense and tautologies. Eventually, in time, language will cancel itself out. In philosophy, this metaphor is called Wittgenstein's ladder[2], because of proposition 6.54 of the Tractatus Logico-Philosophicus. 'My propositions serve as elucidations in the following way: anyone who understands me eventually recognises them as nonsensical, when he has used them—as steps—to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.) He must transcend these propositions, and then he will see the world aright'. Every linguistic construction has a possibility for miscommunication that can lead to destruction. Every story can be used for domination and bring miscommunication. Even those who remember the past are condemned to repeat it. Even free access to written history and mass education cannot guarantee that the same old propaganda slogans from every pole of the political spectrum will not be used again. The phenomenon of collective stupidity is becoming even more evident with mass communication and social networks. Real-time translation and the monopoly of standard languages make people more susceptible to irrational forces, whether intentionally or not. We should never underestimate the power of stupid people in large groups, says George Carlin. This is like the phenomenon of the stupidity of crowds, where the average intelligence level of individuals united in a crowd tends to the lower limit of the group. Collective stupidity is the side effect of large language communities and especially in periods of digital globalisation. Today, the linguistic groups are getting larger, with half of the population of the world speaking

[2] Ludwig Wittgenstein, Russell, B. and Charles Kay Ogden (1992). Tractacus logico-philosophicus. London; New York: Routledge.

less than 25 official languages from the seven thousand still existing and thousands of dialects. It looks like nothing can protect people from the monopoly of global languages. There is no way back towards plain speaking and clear understanding of small group dialects. Tearing down the linguistic tower of power and stupidity seems like a utopia.

Chauffeurs' knowledge

Novelty is the ultimate principle of language. Everything possible to be said will be said, just because of the novelty principle. New and new ideologies and stories will be invented and will replace the old ones, no matter if they are better or more meaningful. The increasing complexity of standard languages leads to systemic miscommunication. Collective stupidity is not just ignorance but a choice. Striving to be ignorant together with the thousands and millions around you. The madness and stupidity of the crowds are not something that can be controlled by the educated elites. This can be illustrated with the old Max Planck's Chauffeur Test anecdote. As a part of a joke, the chauffeur memorised the words and gave a public lecture on the new quantum mechanics, pretending to be Professor Planck. When asked a question by the crowd, he said that the question is so easy that even his chauffeur can reply, pointing towards Max Planck. But what was the goal of this public lecture on quantum mechanics? To make the audience understand quantum mechanics. Or to propagate a faith in science and to promote the name of a Nobel Prize winner. To know the name of something is different from knowing the thing. Any public speaking is addressed to the audience as a group. What if it turns out that the crowd likes the speech of the chauffeur better? What if the audience is made up of chauffeurs only? What will be the taste of these audiences if they grow in numbers? Will the size of the crowd affect the content of the lecture?

The growing number of 'chauffeurs' listening to lectures influences the speakers and their language. Every influencer is influenced by their audience, and the speeches of every dictator are dictated by the crowds. Is it possible for the speaker to control the masses with logic and rationality only? It works with small groups of educated people who trust each other. The growing number of listeners diminished the freedom of the speaker as he was required to speak in a way that reflected the feelings and desires of the crowd. A splendid example is the final speech in the movie 'The Great Dictator'. It is unclear whether the speech was meant as a sincere call for peace and democracy or as a subtle warning about the dangerous allure of rhetoric. The fact that any ordinary person (a barber, or a painter like Hitler) can use language to promise utopia and peace, yet lead the masses toward war and destruction, highlights the peril of persuasive speech. In this light, the voice of power emerges as something far greater and more dangerous than any individual. The voice of power as a mystic unifying force, regardless of the content of the speech. It reveals the unsettling truth that language, when wielded before the masses, can control and manipulate even the most well-intentioned of men. Chaplin was acutely aware of the human voice not as a sublime, ethereal medium for expressing the depths of human subjectivity, but as a foreign intruder—something that disrupts and controls us. It is not the man who controls the voice of power, but rather the voice and language that exert control over the man. When Chaplin's character delivers his speech advocating for love and mutual understanding, there is a double irony. The people applaud his words in the same way they had cheered for Hynkel. Furthermore, the music accompanying this humanist message is the overture to Wagner's 'Lohengrin', the same music that plays during Hynkel's daydreams of world conquest with the globe-shaped balloon. This unsettling parallel reveals the voice's

power to shape, manipulate, and even control human behaviour, blurring the lines between good and evil, between genuine human connection and the seductive allure of totalitarian rhetoric. People are forever under the spell of their voice and language. When the hollow premise of every utopia is revealed, the language of propaganda cannot hold its users together. Gradually, the meaning of slogans disappears, and they eventually become just road signs. The unbearable lightness of language is revealed.

Can you trust your thoughts?

The utopia of communication is based on the myth that it can be a perfect language. The most dangerous side of any ideology is that using divine words is an excuse to stop thinking. Following commands is a matter of faith, and people honour that form of voluntary ignorance. The utopian and ideological language permeates all spheres of today's society. This divine language, which has historically served as a tool for crafting new utopian visions, gets cancelled by itself. The cyclical process of reconstructing ideologies is essential for knowledge production in power systems. As Terhi Rantanen (2024) argues in 'Dead Men's Propaganda[3]', each generation leaves behind a linguistic residue—once visionary, now fossilised—that reveals the ideological dreams and illusions of its time. What was once a call to utopia becomes a relic, awaiting reinterpretation by those who inherit its forgotten codes. This "dead men's language" becomes part of your inner dialogue as a mechanism of control exerted by societal voices you have internalised, which are often not your own. These voices — representing influential societal figures — create commands within your mind, constantly demanding that you conform to societal expectations. This internal cacophony is designed to ensure that you seek validation from society. Your inner voices demand that you fulfil society's stereotype. Society uses language as a tool to shape and control your inner world. Using language, societal leaders and institutions influence how you think about yourself as a form of conditioning. Quiet experiences of silence and mindfulness, that are outside the societal propaganda machine, are deemed dangerous. Society thrives on motion, consumption, anxiety, and dissatisfaction, so inevitably the language serves this purpose. It relies on you being restless, incomplete, and always striving for more, whereas moments of happiness are still, quiet, and self-contained. In peace and silence, you can find your voice and escape from the oppressive control of societal language with its expectations and commands. The question is, can you trust your thoughts?

By rejecting these inner voices of power, you risk being marginalised or dismissed. Even simply pointing out the wrongs in society could result in being labelled insane. This is an inversion where truth-tellers are discredited while harmful, outdated ideologies and 'dead men's utopias' govern the actions of global powers. John Lennon's statement[4] in a 1968 BBC-2 interview highlights the role of individual thinking: 'I think our society is run by insane people for insane objectives. And I think that's what I sussed when I was sixteen and twelve, way down the line. But I expressed it differently all through my life. It's the same thing I'm expressing all the time. But now I can put it into that sentence that I think we're being run by maniacs for

[3] Rantanen, T. (2024). Dead Men's Propaganda. LSE Press.

[4] www.beatlesinterviews.org. (n.d.). John Lennon Interview: Release 6/6/1968 - Beatles Interviews Database. [online] Available at: http://www.beatlesinterviews.org/db1968.0606.beatles.html./ [Accessed 9 Sep. 2024].

maniacal ends, you know. If anybody can put on paper what our government, and the American government, and the Russian, Chinese... what they are all trying to do, and what they think they're doing, I'd be very pleased to know what they think they're doing. I think they're all insane. But I am liable to be put away as insane for expressing that, you know. That's what is insane about it. I mean, don't you agree?' Intriguingly, Lennon mentions governments' inability to 'put on paper' what they are doing because it highlights how their objectives are so irrational or absurd that they defy coherent explanations. This speaks to the idea that much of their language is either deliberately vague or meaningless, masking the true nature of their actions. Lennon's critique suggests that the language used by governments is not just unclear but intentionally obfuscates reality, making it impossible to transparently communicate their goals. This reflects the broader concept of miscommunication, where language is distorted to maintain power and control, rendering it absurd and disconnected from truth. This 'planned obsolescence' reflects a language that no longer functions to foster understanding but instead serves to obscure, control, and perpetuate power. In this sense, the madness and absurdity Lennon describes are not accidental, but rather a symptom of how language itself is manipulated until it becomes ineffective, as a sign of the collapse of overly complex, disconnected political discourse. The irony is that Lennon, who denounced the madness of power and the incoherence of political language, later dressed himself in the same symbolic power—preaching a utopia in 'Imagine' that erased religion, property, and nations with a language as vague and totalising as the systems he once condemned. Steely Dan's 'Only a Fool Would Say That' mocked Lennon, exposing how even the fiercest critics can become mouthpieces of the very abstractions they once questioned: 'A world become one of salads and sun, only a fool would say that; A boy with a plan, a natural man, wearing a white Stetson hat'.

Self-consuming concepts

The hope that new generations will break free from the interplay between ideology and utopia in big societies is also part of utopian thinking. The intellectual span of a generation often exceeds its biological one, making it difficult to fully break away from the ideological language that has been inherited. Nevertheless, the obsolescence of ideological language is a necessary component of intellectual progress. It allows for the continuous renewal of ideas and the reimagining of utopian visions, ensuring that the pursuit of knowledge remains dynamic and ever-evolving. In this way, the cycle of ideological language and its eventual obsolescence serves not as a barrier, but as a catalyst for the ongoing transformation of speech and thought. The idea of 'Self-Consuming Concepts[5]' can be intriguingly connected to the obsolescence of language, a notion that suggests language and the concepts it conveys are deliberately designed or evolved to become obsolete, outdated, or self-destructive over time. The idea of self-consuming concepts revolves around the idea that certain philosophical ideas contain the seeds of their demise. Similarly, the planned obsolescence of language implies that certain linguistic constructs are inherently unstable or designed to degrade over time. In both cases, the concepts or languages are not built to last but are instead expected to evolve, degrade, or be replaced.

[5] Magnus, B. (1989). Self-Consuming Concepts. International Studies in Philosophy, 21(2), pp.63–71. doi:https://doi.org/10.5840/intstudphil198921269.

Intrinsic instability, ambiguity, and obsolescence relate to language evolution and dialectical processes.

The dialectical nature of thought involves the creation, confrontation, and eventual synthesis or negation of concepts. Language undergoes a similar process, where words, meanings, and expressions evolve, confront new realities, and are eventually replaced. This evolution can be seen as a planned or inevitable obsolescence, where older forms of language are consumed and replaced by new ones. This is a meta-ideological process and affects all knowledge production. For example, even religious traditions with a span of thousands of years are marked with periodical changes of the canon to fit the zeitgeist. These changes are often the result of the obsolescence of the old doctrines. Ideological language, which often tries to encapsulate complex ideas and systems of belief, can be particularly prone to self-consumption. When taken to their logical extremes, these concepts may implode under their contradictions. In the context of language, this can manifest as slogans or buzzwords that lose their meaning or become counterproductive over time. Planned obsolescence of language can thus be seen as a natural consequence of the self-consuming nature of these ideological constructs. This highlights the importance of cultural and temporal contexts. Just as a philosophical concept might be relevant in one era but become obsolete in another, language is also tied to its time and place. Words and phrases that are powerful in one context may become meaningless or even detrimental as contexts shift. The idea of self-consuming ideas also intersects with power dynamics. Those in power may intentionally craft language in a way that serves immediate purposes but is designed to be discarded or reinterpreted as needed. This controlled obsolescence allows for the manipulation of discourse, much like how self-consuming concepts can be used to maintain or challenge power structures. Both philosophical ideas and linguistic constructs can be designed or evolve to self-destruct over time. Whether through inherent contradictions or deliberate design, the instability and eventual obsolescence of language and concepts reveal the transient nature of both thought and communication. This interplay underscores the dynamic and often fleeting nature of the tools we use to understand and describe our world.

Cultural kill switch

The idea that the mechanism of self-consuming concepts could function as a safety trigger against the dangers posed by violent political ideologies of power and domination is a fascinating proposition. A built-in self-destruction of concepts and ideas to prevent the suffering and destruction of people and their environment. A hidden linguistic mechanism as a safeguard for the dark side of language. This concept suggests that the inherent instability or self-destructive tendencies within certain ideologies and linguistic constructs serve as a safeguard, preventing them from perpetuating unchecked harm over time. If auto-destructive concepts act as a built-in shutdown mechanism, they carry within them the seeds of their undoing. This means that as these ideologies or languages of power reach their zenith, they also approach a critical point where their internal contradictions, overreach, or inherent flaws cause them to collapse. This collapse could be seen as a natural protective mechanism, preventing the ideology from causing indefinite harm. The prevention of total domination of one ideology over a certain time and place. Totalitarian regimes and oppressive systems often rely on complex and manipulative language to maintain control. If the language itself is designed to self-consume and expire, it would eventually undermine the system's ability to sustain its grip on power. As

the language deteriorates (becoming increasingly hollow, contradictory, or meaningless), the ideology loses its ability to convincingly dominate the populace. A turning point of ideological exhaustion and widespread disillusionment is reached. Political ideologies, especially those that are violent or extreme, often have a limited lifespan due to their radical nature. The self-consuming nature of these ideologies ensures that they burn out rather than achieve stable, lasting dominance. It is time for a cultural and linguistic reset. As these ideologies and their associated languages consume themselves, they leave space for cultural and linguistic renewal.

The collapse of one system creates an opportunity for new, potentially more just, and balanced systems to emerge. This reset can be seen as a natural cycle, where the end of one ideological or linguistic era paves the way for original approaches that are less susceptible to the same pitfalls. Self-consuming concepts might also resist co-optation by oppressive forces. As an ideology or language becomes more rigid and dogmatic, it loses the flexibility that allowed it to gain power initially. This rigidity can lead to its downfall, as it becomes incapable of adapting to new challenges or internal dissent, further accelerating its decline. If we consider this mechanism as a deliberate or natural safeguard, it could imply that the very complexity and contradictions inherent in dominant ideologies and languages contain the blueprint for their downfall. This offers a more optimistic view of history and human society, suggesting that even the most oppressive systems are not invulnerable and are subject to eventual collapse due to their internal flaws. Understanding the self-consuming nature of harmful ideologies and languages could empower individuals and movements to expose these flaws, hastening the collapse of oppressive systems. It could also inform the creation of new ideologies and languages that are more resistant to corruption and more aligned with human values. The very traits that make certain ideologies and languages powerful also contain the potential for their undoing. This built-in obsolescence could be seen as a natural defence mechanism within the fabric of thought and communication. A cultural kill switch ensuring that no single ideology or language of power can maintain dominance indefinitely.

'As societies grow decadent, the language grows decadent, too. Words are used to disguise, not to illuminate, action: you liberate a city by destroying it. Words are to confuse, so that at election time people will solemnly vote against their own interests.'
-Gore Vidal, The Decline and Fall of the American Empire

Breaking the cycle

The idea of cultural cycles and the decay of dangerous political ideologies and complex systems of power can be connected historically to cycles of debt cancellation. Jubilees were seen as moments of revelation or apocalypse that exposed complex lies and myths, serving as a means of societal renewal and simplification. In the Old Testament, a Jubilee year was a year of liberation and restoration, occurring every 50 years. Debts were forgiven, slaves were freed, and the land was returned to its original owners. This practice, as described in the Book of Leviticus, was meant to reset the social and economic order, preventing the permanent accumulation of wealth and power in the hands of a few. It was a radical form of societal renewal, aimed at breaking cycles of exploitation and restoring balance. In many ancient societies, debt cancellation was seen not just as an economic necessity but as a moral and spiritual act. It was often portrayed as a moment of apocalypse—derived from the Greek word 'apokalypsis', meaning 'unveiling' or 'revelation'. These events revealed the underlying truths about the inequalities and injustices that had built up over time, stripping away the myths and

complex justifications that had been used to maintain the status quo. Throughout history, societies have often fallen into periods of increasing complexity, where systems of debt, power, and language become so intricate and burdensome that they begin to collapse under their weight. The Jubilee or debt cancellation can be seen as a deliberate simplification—a way to clear the slate and start anew. This reset was not just economic but also cultural and linguistic, as it often involved the dismantling of the complex myths and ideologies that justified the existing order. Just as debt cycles build up unsustainable pressures that eventually require a reset, complex political ideologies and languages of power create a web of myths and lies that can only be maintained for so long. These ideologies, by their nature, are self-consuming because they create contradictions and tensions that cannot be indefinitely sustained. When these concepts reach a breaking point, they collapse, much like a society that can no longer bear the weight of its debts.

The simplification of these complex systems—whether through a Jubilee or the self-destruction of an ideology—serves as a revelation. It unveils the underlying truths that had been obscured by layers of abstraction and deception. This process of apocalypse leads to more honest human life, where the false complexities are stripped away, and society can return to fundamental and equitable principles. The historical cycles of debt cancellation and the concept of self-consuming ideologies both highlight a pattern of renewal through collapse. When systems become too complex and unjust, they eventually consume themselves, leading to a period of renewal. This renewal often involves a return to simpler, more honest ways of organising society—whether through the resetting of economic relations or the rejection of oppressive ideologies. The word revolution from Latin 'revolvere' (turn, roll back) from early 15c. means 'a cyclical reoccurrence, recurrent changes or events'. In the modern world, where economic systems, political ideologies, and even language itself can become overwhelmingly complex, the idea of a built-in kill switch that leads to renewal is increasingly relevant. The cyclical nature of these collapses serves as a reminder that complexity and power cannot grow indefinitely without consequence. Just as ancient societies used Jubilees to restore balance, there may be a need for contemporary forms of 'apocalypse' or revolutions that simplify and reset our social, economic, and political systems. The connection between self-consuming concepts, cycles of debt cancellation, and moments of revelation points to a deep historical pattern: as societies become more complex and dominated by intricate systems of power and language, they also create the conditions for their collapse. The revolutions serve as necessary resets that strip away the lies and myths, revealing the truth. This cyclical process of complexity leading to collapse and renewal is a powerful mechanism for maintaining balance and preventing the unchecked accumulation of knowledge, power, and domination.

Castles made of sand

Ideological language, much like the stories we tell ourselves, serves as a powerful tool in the continuous crafting of utopias—grand visions of perfect societies that reflect the ideals and dreams of those who conjure them. Yet, just as these utopian constructs emerge from the fertile imagination, they also carry within them the seeds of their obsolescence. Language, after all, is not static; it evolves, decays, and eventually falls uncoordinated with the ever-shifting realities it seeks to describe. This planned obsolescence of language is not merely a flaw but a natural and necessary process. It allows for the perpetual cycle of constructing and deconstructing ideas. It ensures that the concept of utopia remains fluid, forever out of reach, and thus eternally

compelling. However, the same language that builds utopias also constructs their darker counterparts—dystopias. These imagined worlds, often depicted as bleak and oppressive, offer a counterbalance to utopian ideals. Dystopias ground our utopian fantasies in a more sobering reality, reminding us that the pursuit of perfection can lead to its opposite. Dystopias may be closer to the truth of human experience, serving as cautionary tales that highlight the potential dangers of unchecked ideologies. The process of building and destroying these ideological 'castles made of sand' is a cyclical one. Ideologies are designed to be broken, their language intentionally ephemeral, to make room for innovative ideas and new visions. This cycle ensures that we are not trapped in the utopias of past generations that, if left unchallenged, could ossify into dystopias for the living. Thus, the obsolescence of language, miscommunication, and the inevitable decay of ideology are not merely signs of failure but indicators of a dynamic and adaptive culture. A culture that, through the continuous creation and destruction, maintains a balance between aspiration and reality. It is in this balance that we find the true value of language—as a tool for perpetual renewal.

By allowing concepts to consume themselves—to rise, reach their peak, and then fall into disuse or transformation—society creates space for the latest ideas, new voices, and new expressions. This cyclical process mirrors the eternal recurrence, where destruction is not an end but a precursor to rebirth. It is through this cyclical renewal that balance is preserved, ensuring that no single voice, idea, or concept can exert unchecked power over time. The Tower of Babel is doomed to collapse. In the poetic words of Jimi Hendrix, 'And so castles made of sand melt into the sea eventually'. The words of poets seem free from the corruption of the language of power and domination. But is it like that? Is poetry, literature, and speech as an art form the last sanctuary of the divine language that cannot harm? Poetry, often seen as a refined and sensitive art form, has also been a powerful tool for propaganda. Throughout history, dictators such as Nero, Stalin, Mao Zedong, Benito Mussolini, Adolf Hitler, Kim Il-sung, Radovan Karadžić, Ayatollah Khomeini, Saddam Hussein, and Osama bin Laden have written poetry, using it to craft narratives that manipulate the emotions of their followers. While poetry is typically associated with beauty and delicacy, it can become a weapon of control, sentimentality, and even violence. Many powerful leaders also harboured artistic ambitions, channelling their frustrations into political agendas and mastering propaganda as a form of art. These leaders understood the emotional and symbolic power of verse, using it to humanise their power, justify their violence, and manipulate their people. Throughout history, poetry was used as a tool of control, revealing the unsettling connection between the language of the poet and the language of the dictator. The poetic language softened the edge of dictatorship, making their commands more palatable and even emotionally stirring. Poetry is just using the beauty of language to obscure the reality of oppression and aggression. The veil of romanticism slightly covers the cold logic of power, making the rhymes of poets both seductive and dangerous. At the end, the word 'dictator' comes directly from Latin dictare 'say often, prescribe', and dicere 'to say, speak'.

The great speech

The anecdote of the barber standing in for the dictator in 'The Great Dictator' highlights how language can humanise or dehumanise, depending on its intent. Charlie Chaplin's involvement in political discourse through 'The Great Dictator' reveals the complex intersection between art, propaganda, and power. As the United States hesitated to enter World War II,

Chaplin, a British citizen, used his platform to criticise fascism and advocate for intervention, which led to his being accused of promoting pro-war propaganda[6]. His speeches, particularly his call for opening a second front in Europe, were interpreted by many as pro-Communist, especially in a political climate already suspicious of Soviet Russia. Chaplin's art and public statements were increasingly viewed through a political lens, leading to his exile from the United States. Ironically, the man who gave one of cinema's most famous speeches for humanity and freedom became a victim of the very political machinery he sought to critique. Chaplin's experience shows that the language of art, like the language of dictators, can be perceived as dangerous, especially when it challenges the political status quo. Thus, even as Chaplin sought to use his art for peace, it was co-opted into the narratives of propaganda, proving that no artistic expression exists in isolation from political consequences. Charlie Chaplin found his political voice with his first sound films, particularly in 'The Great Dictator'. Breaking the silence that had defined his career as the Tramp, Chaplin used his voice to deliver bold political messages. His transition from silent film to sound was not just a technical shift—it marked a deeper transformation where his art became explicitly political. He advocated for peace, unity, and democracy, but this newfound voice soon became controversial and even dangerous.

At the 1941 gala for Franklin D. Roosevelt's inauguration[7], Chaplin was invited to repeat his 'Great Dictator' speech, where he passionately declared, 'You, the people, have the power... let us all unite!' While this speech was intended as a plea for unity, it increasingly became viewed as politically charged, especially in the tense atmosphere of the time. Later, during a fundraiser for Russian war relief, Chaplin gave another speech, planned for just four minutes, but ended up speaking for forty, calling for unity across political ideologies to win the war. His remarks, including statements like 'if that's communism, there's a lot of people in the United States that'll vote for it', were seen as extremely dangerous in an era of growing suspicion. Chaplin, having long remained silent, now found himself unable to stop speaking, but his words were increasingly perceived as dangerous. Words in the mouths of popular figures shape the boundaries of what entire nations can achieve. It is said that no mother would willingly send her son to war without the influence of propaganda. What began as a speech for peace and unity in 'The Great Dictator' was later interpreted as war and communist propaganda, leading to mounting scrutiny. Chaplin's political voice, once seen as inspiring, became a source of controversy, contributing to his downfall in America. Chaplin faced accusations of communist sympathies, and his personal life, including a paternity suit and marriages to much younger women, sparked public and media outrage. An FBI investigation followed, leading to his forced departure from the U.S. in 1952 and eventual relocation to Switzerland. After his exile, his films took on a noticeably darker tone. Having found his voice both artistically with sound cinema and politically through his beliefs, Chaplin became disillusioned, losing his once-hopeful faith in the future and the inherent goodness of people. It was as if the 'voice' of the dictator Hynkel

[6] Menand, L. (2023). The War on Charlie Chaplin. [online] The New Yorker. Available at: https://www.newyorker.com/magazine/2023/11/20/charlie-chaplin-vs-america-scott-eyman-book-review./(Accessed: 15 August 2024).

[7] Charlie Chaplin (2020). Charlie Chaplin - Speech from The Great Dictator at Franklin D. Roosevelt's Third Inaugural Gala. [online] YouTube. Available at: https://www.youtube.com/watch?v=FQRThCFU5vQ [Accessed 4 Sep. 2024].

had affected him. He came to realise that even his famous speech for unity and peace was just empty rhetoric in the face of the world's harsh political realities.

Tools of shallow thinking

In Plato's famous dialogue 'Phaedrus', Socrates questions the impact of writing on human memory and intelligence. He warns that it will lead to forgetfulness, as people will stop using their minds and instead rely on written records. People would seem knowledgeable but know extraordinarily little. Today, with the rise of computers and digital data, these concerns seem more relevant than ever. As soon as people could record their thoughts externally, they began to depend less on their own memory. Digital technology allows us to store and search for information and ideas, but it also encourages us to rely on these external sources instead of developing our internal cognitive abilities and personal emotional connections. These external tools simplify your thinking, making it shallow and superficial. Research[8] on Google's effects on memory has shown that when people know information is easily accessible, they tend to focus on where to find it rather than understanding the content itself. While these tools may free up mental space for higher-level thinking, they also reduce the brain's capacity for memory and intellectual effort. Using these mental prosthetics, you are not searching for information by yourself, so you do not remember your own path of knowledge. As a result, the internal cognitive abilities diminish. People hear and read more information than ever, but without engaging deeply, they risk becoming shallow thinkers[9]. The more complex the culture and language become through these technologies, the more human thoughts are reduced to simplistic ideas. Instead of enhancing our intelligence, climbing the Tower of Babel leaves us with a mind that is reliant, weakened, and unable to fully engage in deep or original thinking. Throughout history, every major communication technology—whether it is writing, the printing press, the telephone, television, the internet, or artificial intelligence—has promised to advance human intelligence and collective organisation. Yet rather than leading to enlightenment, these innovations often trigger cycles of intellectual and linguistic decline. However, this intellectual decline may serve as a protective mechanism. If every recent technology resulted in perfect understanding and organisation, the concentration of power could easily spiral into danger. The fragmentation and distraction created by each technological leap may prevent unchecked control and domination, offering a safeguard against the potential for self-destruction. Instead of pushing humanity toward dangerous levels of collective intelligence and power, this decay can keep ambitions in check, preserving a delicate balance between progress and safety.

The Babel myth exposes the idea of the confusion of language. Wittgenstein's concept of 'private language' argues that language is only meaningful when shared by a group and becomes meaningless when used by an individual in isolation. But this is true in the sense that it is a small group of closely related people and that the individual can be isolated when he feels alienated in a big society. Language functions as an instrument that depends on social interaction for trust and support. Without a shared context, language can easily lead to

[8] Sparrow, B., Liu, J. and Wegner, D.M. (2011). Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips. Science, [online] 333(6043), pp.776–778. doi:https://doi.org/10.1126/science.1207745.

[9] Carr, N. (2010). The Shallows: What the Internet Is Doing to Our brains. S.L.: W W Norton.

confusion, miscommunication, and a breakdown in communities. When language is abstracted from the social framework that gives it meaning, it risks becoming fragmented and unclear, underscoring the importance of collective use in avoiding confusion. Rather than being something sacred or extraordinary, language is simply a tool, and every person, family, or group of friends could invent their own tool. The simple communication with 'private language' that binds us to those closest—our family, siblings, and friends—is more than enough to sustain meaningful relationships. Do we truly need anything more? Isn't a life rooted in these intimate connections sufficient? Or is a common life together no longer enough? Yet, people constantly seek more, driven by the complexity of our language. Going up the ladder of technology, our increasingly intricate words create confusion, isolation, and conflict. The higher people climb in search of meaning, the further they drift from the simple truths they once knew. Complex human communication creates new problems that simple language cannot solve.

Evil talk, simple talk

In his book 'Crazy Talk, Stupid Talk: How We Defeat Ourselves by the Way We Talk and What to Do About It[10]', Neil Postman examines how language can often be harmful and even destructive. He divides harmful speech into two categories: 'stupid talk', which results from careless mistakes and has limited, often immediate negative effects, and 'crazy talk', which is more dangerous. Crazy talk is persuasive and semantically sound but rooted in irrational or misleading assumptions, often promoting destructive ideas that distort reality. Postman argues that about half of all communication falls into these harmful categories, undermining real understanding and fostering conflict. Crazy talk is insidious because it creates simplistic, absolutist narratives—like framing complex relationships as oppressor and oppressed—that disregard the nuance of human experience. It traps people in its limited logic, making it difficult to question or escape. In this way, language can be a powerful tool of deception and manipulation, promoting division and irrational thinking. Postman suggests that much of the harm done by language is not just accidental but systemic, as crazy talk redefines the norms of communication, spreading destructive ideas that can have wide-reaching consequences. By recognising and resisting such talk, people can protect themselves from being misled or manipulated. But what about evil talk or 'evil language'? Language becomes truly evil when it is used to justify, defend, or normalise acts of violence, oppression, and cruelty, as often seen in political rhetoric and propaganda. Politicians, propagandists, and other influencers can manipulate language to rationalise atrocities like torture and killing, cloaking these actions in terms that make them seem necessary or even virtuous. By reframing violence as 'defence' or 'protection', and labelling enemies as 'subhuman', such rhetoric dehumanises victims and numbs the public to moral consequences. This form of evil language persuades people to accept or participate in inhumane actions by twisting ethical frameworks. When leaders speak of 'collateral damage' instead of civilian deaths or refer to torture as 'enhanced interrogation', they are not just communicating—they are shaping a moral environment in which violence is

[10] Postman, N. (1977). Crazy talk, stupid talk : how we defeat ourselves by the way we talk and what to do about it. New York: Dell.

acceptable. Such language works to diminish critical thinking and desensitise people to the true impact of their actions, turning language into a tool for evil. The danger lies in how easily this manipulative speech can influence collective consciousness, making it seem as if there are no alternatives to violence and destruction. It encourages complicity, allowing individuals to participate in or tolerate atrocities without fully confronting the ethical cost. In this way, language, when used for evil purposes, can have far-reaching and devastating effects on society. Evil speech is a powerful tool used to distort reality and manipulate moral perception. It takes acts of cruelty and destruction and frames them as necessary or even virtuous, stripping away the natural feelings of guilt and shame that would typically arise from such actions. By presenting violence as a duty or higher cause, this kind of language desensitises individuals, allowing them to partake in atrocities without questioning their morality. This language often emphasises purity or honour in the execution of evil, creating a false sense of righteousness. It dehumanises victims and reframes destruction as a protective measure or a moral imperative. Through this manipulation, evil speech not only absolves individuals of personal responsibility but also reshapes their internal moral compass, allowing them to act in ways that would otherwise be unconscionable. The effects of such speech are profound: it numbs empathy, rationalises cruelty, and fosters a collective sense of justification for even the most inhumane actions. By removing the moral weight of decisions, evil speech enables cycles of violence and oppression to continue unchecked, shielded by the belief that the actions taken are necessary and right.

The best use of language

What is the opposite of evil speech? What language avoids systematically distorted communication? What is the best use of language? According to Jürgen Habermas[11], it is what he calls the 'ideal speech situation'. In this concept, communication is free from manipulation, coercion, or distortion, allowing participants to engage in open, honest dialogue where the only force is the strength of the better argument. In an ideal speech situation, several conditions must be met, such as equality of participation, absence of coercion, truthfulness, and rational discourse. All participants must have equal opportunities to speak, question, and express their views. No one should be pressured or manipulated into agreement; participants must be free to express their genuine opinions. Each speaker is assumed to be sincere, aiming to contribute to mutual understanding rather than personal gain or deception. The discussion is oriented toward reaching consensus through logical reasoning and critical reflection, rather than through emotional appeals or rhetorical manipulation. The concept of an 'ideal speech situation' aligns with the idea that the ultimate power of language lies in simple dialogue. When communication is free from manipulation and power dynamics, it becomes communion rather than only understanding. Such conversations reflect the deepest purpose of language—creating harmony and connection, where words flow as music and mutuality is the goal. These intimate exchanges are more significant than formal or institutional discourse, which often serves external agendas. Instead, the beauty of simple talk lies in fostering connection and understanding, making it the ultimate form of communication, far more important than the official goals of society or

[11] Habermas, J., 1984. *The Theory of Communicative Action, Volume 1: Reason and the Rationalization of Society*. Translated by T. McCarthy. Boston: Beacon Press.

institutions. The ultimate beauty and power of language might be found in the simplicity of meaningful conversations with those close to us.

According to Bulgarian writer Tsvetan Stoyanov[12], the 'great conversations' are more than just passing time; they are akin to art. The performative art of conversation involves rhythm, melody, and a deep connection, requiring harmony between two people. In these moments, words become unnecessary as understanding flows effortlessly, creating a shared experience where thoughts move together. The true magic lies in the feeling of being completely understood, of sharing thoughts and feelings in perfect unison, like a concert between two souls. Such conversations, though fleeting, leave lasting impressions. They might not be recorded like a poem or a sculpture, but their impact continues to shape and guide us long after the words are forgotten. These exchanges give us joy, closeness, and meaning, far beyond what we might initially realise. They have the power to break down barriers, heal wounds, and bring a sense of unity to a world that often feels fragmented. Through good conversations, we find a connection with others that fulfils a fundamental human need for closeness and understanding. In the end, nice conversations reveal that people seek each other not out of necessity, but because we naturally crave this sense of closeness. They remind us of the beauty in our relationships and encourage us to create more of these meaningful interactions. In their simplicity, they may be among the most valuable and fulfilling moments in life. Kurt Vonnegut highlights the importance of recognising and appreciating simple moments of real connection with loved ones, rather than focusing on grand victories. 'So when we were drinking lemonade under an apple tree in the summer, say, and talking lazily about this and that, almost buzzing like honeybees, Uncle Alex would suddenly interrupt the agreeable blather to exclaim, 'If this isn't nice, I don't know what is'.[13] His uncle Alex, a graduate of Harvard, taught him to notice when things are going well—whether it's talking with family or friends, or even sitting together in peaceful silence. These small, everyday moments are where true happiness often lies if you acknowledge their beauty and remind yourself, 'If a simple talk isn't nice, I don't know what is'. The simple wisdom holds that the origin of all human achievements can be traced to the genuine connection forged through the 'quiet art' of great conversations.

Down the ladder of babble

The ladder metaphor, used by both Mauthner and Wittgenstein, serves as a powerful representation of how the role of language is understood, though with different nuances. Should people climb the ladder using even more complex language in search of God? Or go down the ladder of useless words in search of their fellow man? Mauthner's ladder analogy illustrates how language stores historical information. As one climbs a ladder, each new rung that is grasped pushes the lowest rung underground, symbolising how previous stages of language are forgotten but still preserved within it. This process highlights the evolution of language, where old meanings are buried yet remain foundational to new developments. 'I must destroy the language behind me and in front of me and within me from step to step, so I must smash every rung of the ladder by stepping on it'.[14] Mauthner's critique of language demands that each step of the ladder be destroyed once used, so that future climbers must rebuild and destroy it again as they ascend, constantly reshaping language. This also reflects the historical layers that

[12] Tsvetan Stoyanov (1988). *Sŭchineniia v dva toma*. Sofia
[13] Vonnegut, K. (2007). A Man Without a Country. New York: Random House Trade Paperbacks.
[14] Mauthner, F. (2014). Beiträge Zu Einer Kritik Der Sprache. Nabu Press.

language accumulates and retains, even as it evolves. Wittgenstein, in his 'Tractatus', proposed that the propositions in his book are like rungs on a ladder that must be climbed to achieve understanding, but once this understanding is reached, the ladder (the propositions) should be discarded. This reflects Wittgenstein's view that language can help people see the world correctly, but once that clarity is attained, the limitations of language are exposed, and it must be recognised as inadequate or senseless. In Wittgenstein's words, 'whereof one cannot speak, thereof one must be silent'. Mauthner poignantly suggests, 'Men learnt to speak to understand one another. Cultural languages have lost the ability to help men advance beyond the most rudimentary level and attain understanding. The time has come to learn to be silent once again'. This signals a deeper critique: that language, which was once a tool for connection, has now become a barrier to higher comprehension. Considering this, as Mauthner suggests, the time has come 'to learn to be silent once again'. This silence, advocated by both Mauthner and Wittgenstein, reflects the ultimate realisation of the limits of language and the need to transcend it in pursuit of true understanding.

The critique of language, prominent in late 19th and early 20th-century philosophy, revolves around recognising the limits of language in conveying true meaning. Philosophers questioned the ability of words to express complex, existential, or mystical truths, and often pointed to silence as a paradoxical yet essential alternative. Mauthner argued that silence was a sceptical response to the failures of language, representing a retreat from the ideals and superstitions language attempts to convey. Wittgenstein proposed that certain aspects of human experience—such as ethics, aesthetics, and the mystical—are beyond the scope of words. The most important truths reveal themselves through intuition and feeling rather than linguistic explanation. Wittgenstein saw the 'solution of the problem of life' not in language, but in the dissolution of the problem itself, suggesting that silence holds the key to understanding what words cannot capture. Both thinkers underscore the potential harms and dangers of relying too heavily on language. When misused, language can obscure meaning and lead to confusion or false understanding. Silence, in contrast, provides a way to transcend these limits, offering space for deeper reflection and the recognition of truths that lie beyond verbal articulation. In a world where language is often overused or misused, the embrace of silence emerges as a necessary counterbalance, guiding us toward greater clarity and understanding. By going down the ladder, one abandons the quest for domination and transcendence through language, and instead, finds himself back among those who matter most. Descending the tower of abstract language means that all the complex problems are forgotten. Most of the books in the dusty bookcases in university faculties around the world will be forgotten and this is their fate. Going down the tower of babble means leaving the realm of empty words and overcomplicated ideas and returning to the simplicity of genuine human connection. Simple and direct communication—rooted in love, trust, and togetherness—devoid of the entanglements of elaborate language. The only true solution is silence, where you can finally be content with the others, free from the burdens of language, and grounded in the peace that comes from simply being together. Heaven(same as Hell) is other people.

Tao Te Ching, verse 16

'Forget about knowledge and wisdom,
and people will be a hundred times better off.

Throw away charity and righteousness,
and people will return to brotherly love.
Throw away profit and greed,
and there won't be any thieves.
These three are superficial and aren't enough
to keep us at the centre of the circle,
so we must also: Embrace simplicity.
Put others first. Desire little'.

Preface: THE PLANNED OBSOLESCENCE OF LANGUAGE 41935

'Before men act, they judge. Before they move, they must imagine. The manipulation of behaviour begins with the manipulation of meaning'.
— Hannah Arendt

'The whole culture is moving towards the advertising mode, where persuasive communication is the only communication'.
— Marshall McLuhan

'Discourse is not simply that which translates struggles or systems of domination, but is the thing for which and by which there is struggle'.
— Michel Foucault

'The jargon of authenticity... converts every thought into a cliché'.
— Theodor W. Adorno

'Language can be a screen which stands between the thinker and reality'.
— Karl Popper

1. Dark side of language

1.1. First weapon drawn in conflict

Is language a weapon?

What is language? One of the many definitions according to Google is: 'Language is the glue that holds people together. It is the foundation of civilisation. Language is the first weapon drawn in the conflict'. It is a great definition, but it turns out it is a part of a movie script. At the beginning of the movie 'Arrival', physicist Dr. Ian Donnelly (Jeremy Renner) recites the opening lines from a linguistics text written by Prof. Louise Banks (Amy Adams). 'Language

is the first weapon drawn in a conflict', he reads. That line highlights the film's core themes of communication and conflict. As the story unfolds, it becomes evident that a culture's formulation, visual representation, and use of language often reflect its identity, including its darker aspects, which may not always be immediately apparent. A constructive force for building larger communities, human language is a tool for preserving values and traditions for millennials. However, language also has a dark side, and it is used for dissent, division, and miscommunication in the same large communities. Like in the myth of Babel, language is responsible for building the tower and for its destruction. It is a dangerous time when one language is used by large groups of people. The nature of human communities defines the language they use, not vice versa. In the beginning was the singing ape, not the word. People precede language. This makes it exceedingly difficult to understand because of the paradox of subjectivity. The language as a subject for the world is one thing, while the language as an object in the world is something else. Understandably, people tend to idealise language and its use for community building and human progress. It is seen as something inherently good that needs admiration rather than control and development. At the same time, there is a systemic bias about language as a destructive force. One thing is true; language can be a weapon. Every war starts with propaganda. The evil use of language as a tool simply shows the negative side of human nature. So, how to avoid this inherent human bias about language? Just as in the movie 'Arrival', only an extraterrestrial or nonhuman view of the matter will shine a light on this dark side. It is said that there are no weapons stronger than words. They hit faster than a bullet and never fail to hit the heart. Even without maleficence language can be harmful to people who use it. It is a dangerous weapon for survival, and exactly like fire can also bring damage. The dark side of language is not only in the form of verbal abuse but also psychological harm. Language plays a crucial role in psychosis and sometimes a mental disorder is a linguistic experience. Apart from malevolent speech, disorganised language is the path to dangerous delusions, utter stupidity, and madness. Often, people can become obsessed with the infinite possibilities of signification of language and use it to reach the darkest places of human consciousness. This dangerous nature of language is usually found in the rich and complex languages of advanced civilisations. It is usually a sign of decadence and collapse of values and meaning.

Primum non nocere

The study of mass miscommunication explores how intentional efforts, historical shifts, and technological advancements contribute to the erosion of linguistic richness, threatening the very essence of human expression by amplifying the destructive effects of mass communication and human civilisation itself. However, the concept of 'planned obsolescence' presupposes some intention and design in the forces for destruction as a form of renewal. In this case, the non-maleficence principle of 'first, do no harm' (Primum non nocere) cannot be used for the language even when it is investigated as a source of detriment. This principle is useless when investigating human nature. Language is a tool created and used by people, so it reflects their characters. It was regularly used in harmful ways, even in small groups, families, and tribes. But since it became an instrument for uniting tribes in nations, the harmful effects on individuals and small groups increased dramatically. Language strengthens people's sense of connection to their culture, enhancing their mental well-being and fostering greater social cohesion. In big states, the official language is much more than the sum of its dialects. It becomes the culture of

the nation. The sense of domination, greatness, and power became the main goal of a national language. This language was created to be ambiguous and universal, so words can be easily obfuscated. Words stand in for concepts that unite people, but they also very easily make groups stand apart from each other. The basic uses of language as a societal tool are for the expression of ideas, transportation of information, and creation of ideological communities. When the language becomes obsolete and loses its shared meaning it is time for renewal. The fastest way for societal change is to change the names of the ideology and institutions. The new language saves a lot of energy and effort to change the real conditions of life and power connections instead of only changing the names. The goal of this language is to build communities of trust and common beliefs, not to deal with problems. Complex languages create purely linguistic and philosophical problems just to divert attention from the status quo. Language as a tool of power has a deeply conservative nature. The process of communication is not merely the transportation of words but a transformation of individuals into virtual collectives. This is how nations are created, usually using some creation myth and historical storyline. Language as a tool for mass communication is also a tool for control and domination of large groups of people. Language is the stuff that empires are made of. Empires throughout history have relied on language to establish control, unify diverse populations, and propagate ideologies. It is through language that laws are written, histories are recorded, and identities are forged. Just as dreams are constructed from fleeting thoughts and symbols, empires are built and sustained through the words and narratives that define them. Language then, becomes the foundation of these grand structures, the medium through which they persist in history and memory. It shapes not only the present but also how future generations will remember them. Language is used to manufacture consent or dissent when needed, order, or disorder in the name of preservation of the status quo. When the tipping point for societal renewal is reached, political language is the first to change. The political economy of complex languages follows cycles of systematically distorted communication or miscommunication. This heavy use of language as a power tool leads to the decay of complex languages, systematic distortion of communication, and latent dysfunctions of social structures. In the downfall of empires, the failure of language mirrors a broader failure of thought and leadership.

A dialect with an army

The phrase 'A language is a dialect with an army and a navy' humorously underscores the arbitrary distinction between a dialect and a language, suggesting that the classification is often influenced by political and social power rather than linguistic differences. This witty observation, commonly associated with sociolinguist and Yiddish scholar Max Weinreich, was popularised after he heard it from an audience member during a lecture series in the 1940s. Weinreich noted how the speaker used this quip to highlight the marginalised status of Yiddish, illustrating how the perception of a language's legitimacy often depends more on political backing than on inherent linguistic qualities. A language is a dialect with an army because the political role of language is to establish dominance and identity within nations and empires. It reflects how state power—through military and political force—often determines whether a dialect becomes recognised as a legitimate 'language' or is marginalised. The distinction is not solely linguistic but is shaped by the social and political forces that grant authority and status to certain languages over others. This idea aligns with how language extinction occurs through economic, political, and cultural forces that systematically erode languages, often favouring

those tied to dominant global powers. For example, during the spread of empires or colonial regimes, dominant languages often supplanted local dialects. Languages tied to less powerful communities are sidelined or rendered obsolete to promote those that align with national or imperial agendas. In modern times, language policies are instrumental in shaping national identities, often leading to the deliberate marginalisation of minority languages. Governments may promote a unified national language to strengthen national cohesion, but this often comes at the cost of erasing alternative linguistic forms. When a dialect dies, it signifies the loss of a unique perspective on life. It is not merely a disappearance of words, but the erasure of an entire cultural framework—a specific way of perceiving, interacting with, and interpreting the world. Each dialect carries with it distinct knowledge, values, and experiences, and when it vanishes, so does the rich, nuanced understanding of the small world it represents. This is also the case with minority languages, which are systematically neglected, rendering them irrelevant in the broader socio-political landscape. Languages without an army and a navy are doomed to marginalisation. Furthermore, digital technologies and globalisation accelerate this process. In the digital age, certain languages dominate online platforms, while others struggle to adapt, furthering the rapid decline of less dominant languages. This reflects how linguistic imperialism continues in a new form, where the use of global languages in technology and international trade renders others obsolete. The political role of language is intertwined with the dynamics of power. Those in power shape linguistic evolution, ensuring that certain languages rise to dominance while others fade away, mirroring how political control extends even into the realm of communication and identity. This loss of linguistic diversity mirrors how political and economic forces shape communication, consolidating power through the dominance of certain languages. In turn, this leads to a homogenisation of thought, where the diversity of ideas, expressions, and cultural nuances are oversimplified or flattened. The long-term consequences of this linguistic imperialism often contribute to the fragmentation and decline of empires as they lose touch with the diverse cultures and knowledge systems within their territories.

What are 'we'?

The deterioration of language serves as an early warning of an impending decline of the state. The weakening of intellectual standards and the embrace of superficiality signal the beginning of a larger collapse, as the government loses the ability to communicate effectively, solve problems, and maintain coherence. One of the first signs is the loss of the meaning behind the word 'we', caused by growing diversity, dissent, and inequality. When the collective sense of 'we' — the shared identity and unity that binds a society together — begins to erode social cohesion. Without a shared 'we', the language becomes hollow, and the shared vision that once sustained starts to fade. This is a critical early sign of impending instability, as the nation loses the glue that once held it together. People need the concept of 'we' to understand and define their identity as 'me'. Our sense of self is shaped by belonging to a linguistic group that thinks like us, shares our worldview, and uses words in similar ways. 'We' provides the context within which 'me' can exist, offering a shared framework of meaning and language. Through this collective identity, people find a deeper understanding of themselves, as our individual experiences are connected to the larger group’s understanding of the world. The most important question in any language is, 'What are 'we'? In 1975, Muhammad Ali gave a talk to a group of

students who asked him to give them a poem. Ali replied, 'Me, We[15]!' or 'Me? Whee!!' and this couplet competes for the title of the shortest poem ever written in the English language. The first version is about community, and the second is about egotism. One of the shortest poems in English can hold the secret of communication, a freewheeling celebration of the self or altruistic desire for togetherness. These incongruous interpretations show that the ultimate limitation of language is the ego of the person who speaks. Who speaks, why, and to whom? The language was just a tool that initially created a coalition between a few people. After thousands of years, language helped the human population grow to billions. But mass communication changed the use of language forever. The Latin words 'homo sapiens' unite all the people on Earth as 'we'. Navigating the labyrinth of linguistic decay and deliberate manipulation, can 'so called we', the architects of language, descend and desert the orchestrated chaos of the tower of babble and start a new building? Not a tower but a modest home of language. One not of division but of unity, one where sincerity, silence, and mindfulness weave a tapestry of understanding. So, what are 'we'? There is the small 'we'—the people I live among, whose voices, habits, and presence have shaped my "I," making me inseparable from them in language, memory, and identity. Then there is the capital-'We'—those I claim to know through media, institutions, and technology, the imagined masses I align myself with through symbols, narratives, and public rituals. Beyond that lies the ultimate 'We': all of humanity, 'Homo sapiens', an abstraction that exists nowhere except in language, the ultimate medium and technology that forges this metaphor. In creating the greater 'We', Language-as-Society works to dissolve the little 'we' of family and tribe, stripping away my private dialect. As a part of 'We' I stand as an isolated 'free' Individual inside the vast, unreal entity called 'Human Society'. Mass society is the greatest beast on earth.

> *"The Great Beast is the only object of idolatry, the only ersatz of God, the only imitation of something which is infinitely far from me and which is I myself."*
> *— Simone Weil*

Dunbar's number

Dunbar's number, a concept proposed by British anthropologist Robin Dunbar, suggests humans can maintain meaningful relationships with up to 150 people. Language, in this view, originated as a tool for managing increasingly complex social networks, allowing humans to live in larger groups while maintaining the social bonds necessary for survival and cooperation. This connection between language and social structure underscores the idea that language is not just a means of communication but a vital mechanism for social cohesion and group identity. In these larger groups, where individuals lack personal bonds, it is easier for leaders or institutions to use official literary language to influence, manipulate, and control the collective. Narratives can be shaped to create divisions or foster unity, often by manufacturing common enemies or ideological identities. Without the grounding of personal relationships, individuals in large groups are more likely to align with these constructed identities, making them easier to

[15] Gupta, S.D. (2022). Me We by Muhammad Ali. [online] Poem Analysis. Available at: https://poemanalysis.com/muhammad-ali/me-we/.

lead, divide, or control. If the capacity for language and the cognitive load of maintaining about 150 relationships are interconnected as human groups grow, language becomes essential for tracking relationships, maintaining group cohesion, and transmitting cultural knowledge. In extended groups, gossip and storytelling also emerged as ways to build trust, form alliances, and ensure cooperation without direct physical interaction. When personal connections are weakened, wider communities are more susceptible to manipulation and control. In smaller, tightly knit tribes, communication is direct, and trust is built through personal interactions. However, when groups exceed this limit, language becomes the primary tool for cohesion, and abstract concepts like 'us' and 'them' take over. When there is a loss of group and personal identity, one of the easiest and most dangerous ways to renew a sense of collective self-concept is by fabricating an enemy—'us' versus 'them'. This tactic taps into an ancient principle: 'divide and rule'. By manufacturing dissent and fostering division, those in power can create different ideological identities that pit groups against each other, often igniting internal conflict and even 'cold civil wars' within a nation. This strategy capitalises on the human tendency to bond more strongly when faced with a common adversary, artificially strengthening the 'we' by contrasting it against a perceived 'them'. It can fracture society along ideological, ethnic, or social lines, fuelling hostility and undermining unity. While this linguistic strategy of hostile propaganda may temporarily restore a sense of collective belonging, it does so at the cost of deeper division and instability, eroding the very fabric of the nation in the long term. To revitalise the language people must restart speaking local dialects in a small group of people who trust each other. Today to influence only one person looks like a waste of language. Social media gives people the power to speak 'Urbi et Orbi' (To the city and the world), as a papal address. But the purpose of any human language is still to create an emotional bond between at least two people. Me…we! In Vonnegut's words: 'Write to please just one person. If you open a window and make love to the world, so to speak, your story will get pneumonia'. Only by speaking and listening together people can retell the narrative of language's decline, transforming it into a tale of renewal, unity, consent, and trust.

1.2. Conspiracy of ambiguity

Conspirare

The idea of a 'conspiracy of speech' revolves around the intentional manipulation or coordination of language to achieve certain goals, often hidden from the public. In such a context, communication between individuals or groups can be designed to obscure true intentions, protect sensitive information, or manipulate public perception without directly lying. Instead, this type of speech relies on indirect, coded, or vague language that allows participants to maintain plausible deniability while still conveying their underlying message. The 'conspiracy of speech' thus reflects a dynamic where miscommunication is not accidental but intentional, crafted to shield the speaker from accountability or to manipulate the narrative. This deliberate distortion of language allows for subtle influence over public discourse while maintaining an appearance of neutrality or openness. In such instances, communication becomes a tool not for transparency but for control, ensuring that only those who are 'in the know' can utterly understand the message. Much like ambiguity, this form of speech can serve a protective function in situations where direct expression is dangerous, socially risky, or politically sensitive. By using language in this way, speakers can maintain plausible deniability,

convey messages to in-groups, or influence perception without overtly stating their intentions. In this sense, a conspiracy of speech would be a natural, evolved mechanism within communication, allowing for subtlety and nuance, much like the way ambiguity allows speakers to adapt language to different contexts efficiently. This perspective suggests that both ambiguity and conspiracy of speech arise from the same fundamental drive in language: to enable flexible, efficient, and socially strategic communication. Both can function as tools for navigating the complexities of human relationships, where directness may not always be the most effective or safest approach. In this light, communication can be seen not just as a process of exchanging clear information, but also as a means of managing power, influence, and social dynamics. If we look at 'conspiracy of speech' through the lens of its Latin root 'conspirare', meaning 'to breathe together', it evokes a sense of unity and trust among people. All true communicators must be conspirators if their goal is not only the exchange of information but also relationships with others. This perspective highlights how speech functions more effectively and meaningfully between people who share a close bond or mutual trust. In such cases, communication becomes more fluid, nuanced, and instinctive—like a shared breath, where understanding comes from a deeper connection rather than an explicit explanation. When people 'breathe together' in speech, they do not just exchange words; they engage in a shared experience where subtle cues, tones, and unspoken meanings flow more easily. This close communication enhances understanding because the speakers are attuned to each other's intentions, emotions, and context. Such a 'conspiracy' is not about hiding or deceiving but about cultivating a space where language becomes more intimate and effective. In relationships where trust is strong, communication can transcend the literal meaning of words, allowing for richer, more efficient exchanges. Here, language serves as a bridge that reinforces togetherness, creating a sense of mutual understanding that is harder to achieve in more distant or formal interactions.

Linguistic ambiguity

What is the communicative function of ambiguity in language? MIT[16] cognitive scientists have revisited the longstanding debate on the role of ambiguity in language, offering a fresh perspective that challenges the traditional view of ambiguity as a flaw in communication. Contrary to the belief that language should be optimised for clarity, where each word has a single, distinct meaning, the researchers propose that ambiguity enhances communication. By allowing common, short words to carry multiple meanings, language enables speakers to convey information more economically, relying on the listener's ability to use contextual clues to discern the intended meaning. Of course, miscommunication is a possibility and is part of the process. The efficacy of the language game for certain players depends on their abilities, experience, and mindfulness. If ambiguity is inherent to human language, then what is the purpose of systematically distorted communication? This suggests that miscommunication is not a flaw but a feature of language that has evolved to maximise communicative efficiency. For example, in times of social decay and corruption of power, using the vagueness and obscurity of words can be beneficial. On the other hand, doublespeak is often used in politics. The interplay between the sender's need for brevity and the receiver's ability to infer meaning from context creates a system where ambiguity becomes advantageous, streamlining

[16] Piantadosi, S.T., Tily, H. and Gibson, E. (2012). The communicative function of ambiguity in language. Cognition, 122(3), pp.280–291. doi:https://doi.org/10.1016/j.cognition.2011.10.004.

communication by reusing familiar linguistic forms in varied contexts. It underscores the necessity of context in any system dealing with human communication, highlighting the complexity and efficiency of our linguistic capabilities. A perfectly efficient language system, in theory, would eliminate ambiguity, making meaning straightforward to infer without contextual clues. However, the fact that ambiguity is widespread suggests that it might serve an important function. Other than some uses for manipulation, ambiguity enables the reuse of simple, frequent linguistic elements, which are easier to produce and understand. When context provides sufficient information, unambiguous language can become redundant, leading to inefficiency. Thus, an optimal communication system leverages ambiguity, using context to disambiguate meaning without overburdening the listener. These benefits suggest that ambiguity is a natural outcome in any system striving for communicative and cognitive efficiency. That also hints that language tends to make complex and abstract constructions obsolete and to rely on the importance of the concrete situation for understanding. According to the context, doublespeak and irony can be the best communication strategy, even masked as miscommunication.

Doublespeak

In 'The Greeks and Greek Civilisation[17]', Jacob Burckhardt presents a view of ancient Greek culture that contrasts sharply with its idealised image as a cradle of truth and wisdom. Burckhardt argues that Greek society was deeply immersed in deception and sophism. Greeks not only tolerated but often celebrated cunning and fake rhetoric, sometimes placing these above honesty and straightforwardness. As actors, they excelled in the art of presentation and manipulation, both in public and private life. This idea of life as theatre suggests that the Greeks were more concerned with appearance and the persuasive power of language than with truth itself. This cultural tendency is reflected in their politics, and especially democracy, where rhetoric and oratory were prized, and in their literature and philosophy, which often explored themes of duplicity and the ambiguity of human nature. Even the gods in Greek mythology are depicted as deceitful and capricious, reflecting the values of the people who worshipped them. This critical perspective challenges the conventional view of the Greeks as paragons of philosophical virtue, suggesting moral ambiguity. Burckhardt's work invites readers to reconsider the foundations of Western culture, acknowledging the darker aspects of the Greek language as a form of doublespeak. Doublespeak represents a form of linguistic subterfuge, where language is deliberately twisted to obscure, distort, or even invert the meaning of words. This manipulation often manifests as euphemisms, but at its core, doublespeak exploits the inherent ambiguity of complex language. Thus, political language turns it into a tool for deceit and abstraction, veiling the truth in layers of palatable falsehoods. The term 'doublespeak' draws inspiration from George Orwell's dystopian vision in Nineteen Eighty-Four, where language is wielded as a weapon of control. Though Orwell did not coin the term, his concepts of 'doublethink' and 'Newspeak' encapsulate the essence of doublespeak—language designed not to clarify, but to confuse, to defend the indefensible, and to render lies indistinguishable from truth. At the same time, doublespeak is used daily in public communication even by people who

[17] Burckhardt, J., Murray, O. and Stern, S. (1999). The Greeks and Greek civilization. New York: St. Martin's Press.

quote Nineteen Eighty-Four and warn about brainwashing, propaganda, and fake news. This linguistic sleight of hand is most associated with political discourse, where it becomes a mechanism for shaping reality according to ideological agendas. Through doublespeak, the language of power subtly shifts public perception, making the unacceptable appear reasonable and the reprehensible seem justified. It is a form of communication that thrives on ambiguity, where words are stripped of their concrete meanings and repurposed to serve the whims of those in authority. William D. Lutz's book 'Doublespeak' (1989) delves into the manipulation of language used to obscure, mislead, or deceive. Lutz explores how 'doublespeak'—a term for language that deliberately distorts meaning—allows those in power, especially in politics and business, to control narratives and evade responsibility. Various forms of doublespeak as euphemisms, jargon, bureaucratese, and inflated language, show how these techniques are used to manipulate perception and downplay negative outcomes. Doublespeak undermines clear communication, often making it harder for the public to hold institutions accountable. The aim is to manipulate, to obscure, and to lead the audience away from a clear understanding of reality.

Beyond hypocrisy

Edward S. Herman meticulously dissects the insidious mechanisms of doublespeak and doublethink in modern society, offering a compelling analysis in his book 'Beyond Hypocrisy: Decoding the News in an Age of Propaganda[18]'. Herman posits that the crux of doublespeak lies not just in the act of lying, but in the systemic ability to lie with impunity. Whether these lies are crafted consciously or stem from self-deception, the hallmark of doublespeak is its selective curation of facts—highlighting those that serve a specific agenda while discarding those that do not align with the desired narrative. Orwellian use of language is pervasive in political communication with layers of propaganda that saturate media and government discourse. With the use of popular buzzwords and political jargon, language is weaponised to obscure truth, manipulate public perception, and sustain power structures. Today words are increasingly used to deceive rather than to inform and the doublespeak permeates our daily lives, where we all act as conspirators. Welcome to the new era where systematic miscommunication, propaganda, and deception are normalised and accepted by society at large. In this new context, the public, along with political leaders, journalists, public relations professionals, and propagandists, actively participates in or tolerates the 'conspiracy of speech' as part of everyday discourse. Of course, this acceptance erodes public trust and allows for manipulation on a broad scale, but it looks like it is an inherent part of mass communication. The media's role is to amplify government and corporate propaganda and to filter news through ideological and economic interests. With social media, the audience becomes an active agent in obscuring the objective reflection of truth. This leads to a situation where lies and half-truths become ingrained in the public consciousness, as both the institutions that produce these narratives and the public that consumes them accept miscommunication as the norm. Media discourse is far from challenging power, and often works to reinforce dominant narratives, contributing to a cycle of misinformation that is difficult to break. The normalisation of deception has become a key feature of modern political and social life, making it redundant for people to discern truth from falsehood. Again, the ruling words are the words of the ruling parties. One of the most notable features of the book 'Beyond Hypocrisy' is its 'Doublespeak

[18] Herman, E.S. (1992). Beyond Hypocrisy. Black Rose Books Ltd.

Dictionary', which provides a lexicon of U.S. government buzzwords and phrases that exemplify how language is manipulated to serve specific political agendas. It highlights the euphemisms, jargon, and misleading terminology that are often employed to soften the impact of harsh realities, justify questionable actions, or create a narrative that aligns with political objectives. The dictionary is decoding euphemisms as, 'Collateral damage'= Civilian casualties resulting from military action, 'Enhanced interrogation'= Torture, and 'Pre-emptive strike'= An unprovoked attack. There are some inversions of meaning, 'Peacekeeping mission'= Military occupation or intervention, 'Freedom fighters'= Rebel groups that align with U.S. interests (while similar groups opposing U.S. interests might be labelled 'terrorists'). In the selective use of language, 'regime' is typically used to describe governments that the U.S. opposes, while friendly governments, even if undemocratic, are described as 'allies' or 'partners'.

The scale of ambiguity

The power of doublespeak lies in its capacity to erode the very foundation of honest communication outside a small group of trusted people. By exploiting the ambiguity of language, it creates a landscape where truth is elusive, and reality is perpetually reshaped by those who control the narrative. Doublespeak serves as a reminder of the power of language to both enlighten and deceive large masses of people. The scale of the audience affects the ambiguity of language. The larger the group, the bigger the lies. The idea that miscommunication and doublespeak may be essential to human civilisation and political structures reflects a broader truth about how societies function on a large scale. In complex political and social systems, language often serves dual purposes: it communicates, but it also masks, manipulates, and obscures. This strategic use of language can help maintain order, manufacture dissent, and promote policies that might be difficult to justify if stated transparently. Historically, societies have relied on doublespeak or similar tactics to navigate power dynamics. Governments, corporations, and institutions often employ doublespeak to obscure uncomfortable truths or sell certain ideas in a more palatable way. This tactic can prevent rebellion, smooth over controversies, and maintain the status quo, even when the public is aware of its deceptive nature. Miscommunication is intrinsically tied to power because it allows those in authority to manipulate language to control public perception, obscure uncomfortable truths, and maintain social order. It enables leaders and institutions to present policies or actions more acceptably, managing dissent or resistance by framing difficult realities in softer, less direct terms. Through doublespeak, power structures can shape narratives to their advantage, reinforcing their control while appearing transparent or benevolent. Even when people recognise that they are being fed lies, they may accept them because large political structures require a degree of order that direct and brutal truths might disrupt. As societies become larger and more complex, transparency can become destabilising, and doublespeak serves as a buffer between the messy realities of governance and the idealised narratives that maintain public cohesion. In modern times, while the masses may no longer fully believe in the messages propagated through doublespeak, they might tolerate or even expect it. The prevalence of doublespeak highlights how deeply embedded these practices are in governance and media, as it has become an accepted tool for managing public perception. In this sense, doublespeak becomes an unfortunate but necessary part of large-scale societies, allowing governments to function smoothly by avoiding direct confrontation with difficult realities. This echoes the cynical view that doublespeak, though ethically problematic, may serve practical

purposes in maintaining social order and preventing upheaval in political systems that need to manage the expectations and frustrations of millions of people. The paradox of miscommunication is that it is both a barrier to true communication and a necessary tool for large, complex societies. In small language communities like clans, families, or tribes, doublespeak is impossible because communication is rooted in trust, directness, and mutual understanding. In these intimate settings, the consequences of deception are immediate and personal, making doublespeak unsustainable. However, as societies grow into large, bureaucratic nations, the need for doublespeak emerges. Governing millions of people with diverse needs, beliefs, and perspectives requires a more strategic use of language. Distorted communication allows political leaders and institutions to navigate complex issues without causing panic or dissent, offering sanitised or palatable versions of difficult truths. It is used to maintain order, justify policies, and shape public perception.

'Doublespeak is a language that pretends to communicate but really doesn't. It is a language that makes the bad seem good, the negative appear positive, the unpleasant appear attractive or at least tolerable'. – William Lutz[19]

'Doublespeak is not a victimless crime; it assaults the very foundation of ethical communication'.- George R. Bramer

'Political language is designed to make lies sound truthful and murder respectable, and to give an appearance of solidity to pure wind'. – George Orwell

'I just want you to know that, when we talk about war, we're really talking about peace'.
— George W. Bush

1.3. We will get fooled again

The folly of language

'The Planned Obsolescence of Language' is a journey through the intricate tapestry of language studies in three volumes. 'The Conspiracy of Speech' tries to unravel the decay of complex languages, 'The Entropy of Communication' to untangle the systematic distortion of communication, and 'The Tower of Babble' to elucidate the latent dysfunctions of social structures. The Miscommunication Trilogy follows the long tradition of critique of language, but with a new twist: misunderstanding is as fundamental to language as understanding. That is the doom and gloom merchant's view of language. No room for evolution or improvement in communication. Almost like the praise of the folly of language. The potential for words to be misinterpreted is an inherent part of how communication works. Language does not guarantee precise meaning. The idea is that if misunderstanding is possible even once, it becomes a permanent aspect of how language functions. In the words[20] of Rick Roderic: 'Words can always misrefer. Our meanings could always go astray…And if it is possible to misrefer, if it

[19] Lutz, W. (1989). Beyond Nineteen Eighty-four.
[20] 307 derrida and the ends of man (1993) - Rick Roderick (2024) Rick Roderick -. Available at: https://rickroderick.org/307-derrida-and-the-ends-of-man-1993/ (Accessed: 14 August 2024).

is possible to misread, if it is possible to misunderstand, then it belongs to that structure I have called language to do those things. Because a possibility once is a necessity forever'. The concept of miscommunication highlights that language is not fixed; meaning can continuously shift, evolve, and be reinterpreted. Just as there can be no final commentary or interpretation of a text, communication remains open-ended, subject to endless flows of information and reinterpretation. The capacity for misunderstanding is not a flaw but a necessary part of the endlessly evolving nature of language itself. The most difficult word to understand is 'we'. What are the limits of 'we'? How many 'we' are there, really? Billions globally, in continents and countries, or just millions squeezed into cities. Why is it so important for so many people to live in big cities? What role does language play in this urban sprawl? What about the population growth? Can it be that language and communication were more important than agriculture and animal breeding? That the promise of a brighter future, not food, is responsible for the population explosion? Language is what binds us, holds us to our word, and connects us in these tight, overcrowded spaces. But cities—they are efficient, energy-wise, sure. But good, common life together? Communication and understanding? That is where it all falls apart. Megacities use the fallen language of the Tower of Babel. We have built these enormous, sprawling cities, but they are maxed out. The idea of living close to others has reached its limit. The rewards of being a good person in a good company are not enough anymore. Cities, with their advancements, work for the efficient, machine-like life of transhumans, but not for fostering genuine human closeness. Language in cities becomes a tool not for connection but for alienation, constantly selling the narrative of this 'better life' that never quite materialises. Language gives meaning to the struggle for power and control. It is an abstract societal construct that can operate in a radical absence of humans. It is how we sell wars, market pointless jobs, and mask the reality of a disconnected, confused existence. The city might make sense in terms of energy efficiency, but for honest human communication, for the goodness we seek in life, it is a dead end. At the core, a big society is a fragile structure of words, laws, and promises. Break those words, and the whole thing disintegrates. If the storytelling stops, the tower collapses. Like in the movie 'The Imaginarium of Doctor Parnassus' (2009), a mysterious traveller climbs to a remote monastery nestled high in the mountains. He finds monks seated in quiet rhythm, their voices weaving an invisible thread. When asked what they do, one calmly replies, “We tell the Eternal Story.” This story, they say, sustains the entire universe—without it, nothing exists. Stopping the story would mean the end of all things. He laughs—how could something so vital rest on mere words? Yet the monks are solemn. This is their ordained task, their sacred duty. To them, the universe depends not on matter or force, but on narrative. He challenges them. The words falter. Silence settles. The world does not end, but something subtle shifts—an absence, a thinning. The monks stare quietly. “The story stopped,” one says. The traveller turns, half-smiling. “Then perhaps,” he replies, “my work here is done.” Only then do they understand: this was no ordinary sceptic, but the one who dissolves meaning—not with fire, but with disbelief. The story stops, and without it, reality begins to unravel in silence.

Ultima Ratio Regum

The cannons of King Louis XIV of France were historically inscribed with the motto 'Ultima ratio regum', which translates from Latin as 'the last argument of kings'. The phrase symbolises the idea that when all other means of persuasion and diplomacy fail, war becomes the final tool or 'last argument' of rulers. The word 'argument' here suggests both the rhetorical

sense of debate and logic, as well as a final physical force, in the form of cannons or warfare. In this context, words and logic become like weapons themselves, tools used to assert dominance or force a conclusion when all other means of negotiation fail. Just as kings use war as their last 'argument' when diplomacy and persuasion are exhausted, words can similarly be deployed like guns, aiming to overpower the opposition. The phrase emphasises that in both warfare and rhetoric, the goal is often not mutual understanding, but dominance. 'Language is the first weapon drawn in the conflict'. Language, like cannons, can be both persuasive and destructive, depending on how it is wielded. In political contexts, where rhetoric is a primary tool for rulers, the 'argument' can be sharpened like a weapon—just as in times of war, force becomes the ultimate resolution. When words lose their power, violence steps in as the 'logical' extension of that failed rhetoric, reinforcing the truth behind power dynamics. Language shapes consent and dissent, builds and destroys cities, and creates love and hate on a mass scale. It operates within specific groups, at specific times and territories. This discourse is a closed system—inevitably prone to entropy and chaos. To avoid collapse, you either open the system or increase the scale and complexity. But, planned obsolescence, in language and society, is unavoidable. To protect yourself, you simplify your language, reducing nuance. There is a natural limit to complex language—a protective mechanism if you will. Not only does language evolve, but so does the instinct for its collapse. Meaning degrades, and simplification sets in, as those in power often justify mass harm in the name of stability. History shows that intelligent, rational rulers can commit atrocities more efficiently. Verbal abuse is often more insidious than physical violence. Advanced forms of cruelty, like torture, emerge from highly developed civilisations with complex languages. The awful pleasure in harming others is fuelled by myths, stories, and explanations. Evil itself often begins as a linguistic creation, designed to divide and incite conflict. There are linguistic constructions meant to justify violence. When language leads to chaos and collapse the end of equilibrium is reached. Semantic entropy is the point where rational systems reach their maximum lack of meaning. Think of the myth of the Tower of Babel—when humans united and aimed to reach the power of the gods, they were thrown back into division and tribalism. Language fragmented, and they returned to arguing and conflict. It is as if the gods foresaw the destructive potential of language in expanding societies. The planned obsolescence of language is built into the culture. Every time people aim to reach higher, communicate with gods, or understand the secrets of nature, their complex language collapses into babble—hence, the 'Tower of Babble'. The word 'collapse' means 'fall together', from Latin collapsus, of com 'with, together' (see com-) + lapsus 'a slipping and falling, a landslide; falling into error', from 'labi'- 'to glide, slip, slide, sink, fall; decline, go to ruin', which is of unknown etymology. The collapse of a complex linguistic structure sometimes is just 'falling into error together'. In the end, every grand linguistic edifice meets its 'lapsus'-a collective slip that turns striving for the sublime into the collapse of meaning itself.

Fooled again?

The lyrics of the song 'Won’t Get Fooled Again' by The Who reflect a deep cynicism about any possible political change, expressing the idea that despite revolutionary upheaval, society often ends up under similar leadership. The famous line, 'Meet the new boss, same as the old boss', suggests that after revolutions or significant political shifts, little changes in terms of power structures and the nature of leadership. The song critiques political language and revolutionary slogans, implying that they are often tools of manipulation. People are

'hypnotised' by the allure of change, but in the end, the system remains fundamentally the same. This reflects a broader disillusionment with the promises of political movements that result in a return to familiar patterns of control and governance. The lines in the song speak to a cycle where society knows it is being fooled yet continues to go through the motions. The political language, filled with miscommunication and deception, becomes an integral part of maintaining societal order, even if that order is built on lies. The song implies that we need a new leader or system, but it acknowledges the grim reality that any new boss may not be much different from the old one. The 'hypnotised' represent people who have been manipulated or brainwashed, and because they are so deeply convinced, they cannot see the deception themselves. They are not consciously lying because they fully believe in the truth they have been fed, highlighting the idea that many people will continue to follow the same cycles of power without questioning them. But the lyrical hero who sings this song recognises the futility of the changes around him. While he is prepared to survive and protect his family, he also accepts that the 'new' revolution may be no different from the previous system. The repeated refrain 'We don't get fooled again' is ironic — even though people hope they will not be fooled, history guarantees that they will be fooled again, and happily. In the end is 'the same as the old boss', showing that revolutions often replace one flawed system with another that is fundamentally similar. This critique aligns with the concept that political language often relies on doublespeak or manipulation, where change is more superficial than substantive. Despite the initial hope for real change, people end up in similar positions of disillusionment, repeating the same mistakes. For we know that we will get fooled again. The hypnotised are lied to again. But the hypnotists—the leaders, influencers, or manipulators— are themselves deceived, fooled by the very lies they weave. Even while they seem to command the hypnotised masses, the hypnotists are themselves bound by the machinery of official language, which shapes their thoughts before they can shape others'. What they imagine as control is merely their role in a perpetual motion of deception, sustained by the system's own momentum. In such a cycle, language answers to no individual will, and can only end by collapsing under the weight of its own fictions. This could point to a cycle where everyone, from top to bottom, is trapped in layers of illusion, unable to break free from the system of lies. Perpetuum mobile of language—a self-sustaining cycle in which everyone, from highest to lowest, remains ensnared in layered illusions, powerless to escape the machinery of deceit.

Language cannot be jammed

In the conspiracy of political language dissent becomes a commodity and, in a consumer,-driven world, even anti-establishment statements can become part of the media marketplace. As the book ' The Rebel Sell: Why the Culture Can't be Jammed [21]' suggests that rebellion or revolutionary ideals are packaged and sold to the masses, often by the very system they seek to resist. This could manifest through language that presents a facade of rebellion but serves commercial interests. It is a cyclical deception where rebellion becomes another cog in the machine, sold to the people as a solution but serving the same forces of power. The manipulation might be systemic, embedded in ideologies, power structures, or cultural norms that condition the rulers, the ruled, and the rebels to accept and propagate the same old patterns, even when they think they are creating something new or different. This concept highlights the futility of political language for societal changes that do not address the deeper, underlying

[21] Heath, J. and Potter, A. (2004). The Rebel Sell.

issues. Why the political language cannot be jammed? All attempts to disrupt or challenge political discourse through symbolic acts or countercultural rebellion often fail within an existing framework. Any form of alternative expression is quickly absorbed by the capitalist system. Whether it is politics, journalism, or slogans, these forms of dissent are turned into commodities and sold back to the public. Instead of challenging the system, they become part of it, consuming their own power. The words of rebellion are commodified and turned into products. This weakens their original political message, making them superficial and ineffective as tools for change. The system encourages individualistic expressions of dissent because it can profit from them, so these expressions do not disrupt the underlying power structures. Focusing on lifestyle rebellion—such as alternative fashion or consumer choices—gives the illusion of political engagement but distracts from the need for organised, collective action. Political change requires systemic efforts, not just symbolic gestures, or alternative rhetoric. When the words of rebellion are commodified, political language loses its oppositional power. Once symbols of resistance become part of mainstream culture, they no longer serve as challenges to the system. They may still appear rebellious, but their impact is superficial, failing to address the deeper structures of power. Political language cannot be jammed because symbolic rebellion is easily co-opted by the very system it seeks to challenge, turning genuine dissent into marketable products and distractions that do not lead to real change. The rebel, despite his defiance and resistance, seems to accept that he will be fooled again. He is aware that revolutions often lead to superficial change, where new leaders simply replace old ones, and the system itself remains intact. The rebel is not a true leader of change but merely a 'singer of change', someone who can express the desire for transformation but lacks the power or influence to bring about systemic change. His role is purely linguistic—he can inspire, provoke thought, or raise awareness, but he remains trapped in the cycle he critiques. His song is moving, sincere, and inspiring, yet, like the song, it is just words—aspirational but ineffective in causing tangible, lasting change. Language cannot be jammed; the only thing you can jam is yourself.

Hypnotised never lie

The conspiracy of speech is the nature of our political language. In this scenario, the hypnotised are always telling the truth, the hypnotists are not malicious masterminds; rather, they are part of the same flawed, cyclical system. They may believe in their authority or righteousness, but they are deceived just like everyone else. But there is a third group, between the hypnotist and the hypnotised. They are the woken, the dissenters, the rock stars who are brave enough to tell the truth. But the lyrical hero in the song 'Won’t Get Fooled Again' is very aware that he is part of the conspiracy. Even those who think they are not 'hypnotised' like others—whether it is through politics, media, or authority—are themselves mesmerised and co-opted by the forces they oppose. The singer knows that 'we will be fooled again', recognising the cycle of false promises and superficial change. Unlike idealistic speakers, he understands that new systems often mirror the old ones. This admission reflects a realistic, even cynical, view of revolutions, where despite the hope for transformation, the underlying power structures remain the same. By acknowledging this, the singer brings a sense of honesty, accepting that true change is rare, and the cycle of deception continues. In a way, this is a more honest stance. The singer is not pretending that he or anyone else will break the cycle—he sees the pattern repeating and admits it openly. This gives his position a kind of authenticity, even if it is tinged with resignation. While there is no grand solution offered, there is at least clarity and self-awareness in his understanding of the flawed nature of human language and power structures.

The singer's words are a dance of nonsense, tautologies, and self-consuming concepts—beautiful in form yet purposeless. His language exists purely for its own sake, revealing the futility of change while undoing itself. In this poetic self-destruction, his expression becomes art, where meaning dissolves poetically in the beauty of contradiction. A poetic 'song for change' is the fullest possible language. Poetry is the only way to cover up the dark side of language. The fullest expression of what words can accomplish.

'We'll be fighting in the streets
With our children at our feet
And the morals that they worship will be gone
And the men who spurred us on
Sit in judgment of all wrong
They decide and the shotgun sings the song

I'll tip my hat to the new Constitution
Take a bow for the new revolution
Smile and grin at the change all around
Pick up my guitar and play
Just like yesterday
Then I'll get on my knees and pray
We don't get fooled again
Don't get fooled again, no, no
Yeah
Meet the new boss
Same as the old boss'
The Who, Won't Get Fooled Again

2. Necessity of obsolescence

2.1. Planned obsolescence of language

Planned obsolescence

On a distant planet, far, far away, the protagonist of Robert Sheckley's 'A Ticket to Tranai[22]' encounters a society that appears perfect but conceals its flaws beneath a veneer of utopia. One of the story's most striking elements is the invention of 'planned obsolescence' and 'designed discomfort', which the protagonist introduces to revive the economy and culture. Sheckley's satire mirrors real-world practices where companies design products to fail or become obsolete, ensuring a cycle of constant replacement and upgrading. The story goes further, suggesting that planned obsolescence might serve as a social stabiliser. By creating ongoing demand for new products and services, it keeps people engaged in work and consumption, fostering a sense of purpose and progress. In a society where labour defines

[22] Sheckley, R. (2014). Citizen in Space. Open Road Media.

personal and societal value, this endless cycle of production and consumption prevents stagnation and maintains social order. Sheckley's narrative questions the rationality and ethics of such systems, suggesting that the logic of society is upheld by artificial constructs. These ideological constructs may provide a comforting illusion of meaning and purpose, even as they perpetuate a cycle of superficial progress. In this view, planned obsolescence becomes more than just an economic strategy—it is a necessary linguistic structure that keeps the machinery of society running, ensuring that individuals feel their contributions are meaningful, even without true material value. The concept of planned obsolescence finds its origins in the early 20th century, with one of the earliest references being Bernard London's 1932 pamphlet, 'Ending the Depression Through Planned Obsolescence'. London proposed a radical idea where the government would legally mandate the obsolescence of personal-use items to stimulate perpetual purchasing and economic activity. However, it was in 1954 that the term truly gained traction, thanks to American industrial designer Brooks Stevens. Preparing for an advertising conference in Minneapolis, Stevens casually chose 'planned obsolescence' as the title of his talk, a decision that would etch the phrase into the lexicon of modern consumerism. For Stevens, planned obsolescence meant 'instilling in the buyer the desire to own something a little newer, a little better, a little sooner than necessary'.[23] As the phrase gained popularity, it became a point of contention. By the late 1950s, planned obsolescence had become synonymous with products deliberately designed to break down or go out of style quickly, driving continuous consumption. The concept was so ingrained in the public consciousness that even Volkswagen, in its iconic 1959 advertising campaign, took a stand against it. The ads, created by Doyle Dane Bernbach, proudly declared, 'We do not believe in planned obsolescence', positioning Volkswagen as a bastion of durability in a market increasingly dominated by disposability. One memorable ad simply stated, 'No point in showing the 1962 Volkswagen, it still looks the same', highlighting the brand's resistance to unnecessary changes. The critique of planned obsolescence deepened with the publication of Vance Packard's 'The Waste Makers' in 1960. Packard's work exposed the systematic efforts by businesses to create wasteful, debt-laden, and perpetually dissatisfied consumers. He dissected planned obsolescence into two categories: 'obsolescence of desirability' and 'obsolescence of function'. The former, also known as 'psychological obsolescence', referred to the strategy of making a product feel outdated in the mind of the consumer, even when it was still perfectly functional. Industrial designer George Nelson encapsulated this idea succinctly when he noted, 'Design ... is an attempt to make a contribution through change. When no contribution is made or can be made, the only process available for giving the illusion of change is 'styling''.[24]

Language as a commodity?

Can language itself become a commodity? Are words just products we consume to express our identity and social status? Just as we rely on material goods, our economy will demand that we treat language—words, phrases, and slogans—as items that define our place in society. The ritual of communication becomes a consumptive act, where our spiritual and ego satisfaction is found in the phrases we adopt and the slogans we embrace. The more pressure we feel to conform to social norms, the more we express our individuality through carefully chosen words and catchphrases. These linguistic items, like material goods, must be used up,

[23] Adamson, G. and Stevens, B. (2003). Industrial Strength Design. MIT Press.
[24] Packard, V. (2011). The waste makers. Brooklyn, Ny: Ig Pub.

replaced, and discarded with increasing urgency. Our identities are shaped by the words we speak, the hashtags we use, and the slogans we champion, just as our status is defined by the things we buy and display. To sustain this system, language must be consumed rapidly and at soaring prices. New slogans, trends, and phrases constantly emerge, and the old ones are discarded, much like fashion or technology. Just as we seek ever-more complex and costly goods, we hunger for more elaborate and exclusive language—words that give us social capital and prestige. In this cycle, language is both the product and the marker of social worth, with ever-evolving expressions replacing the last in an endless pursuit of relevance and individuality. The relentless production of unfamiliar words, phrases, and ideas—often designed to capture attention fleetingly—creates a linguistic landscape cluttered with discarded concepts and forgotten meanings. The concept of 'planned obsolescence of language' mirrors the strategy where products are deliberately designed with a limited lifespan to encourage frequent replacement. In the linguistic context, this idea refers to the intentional or systematic erosion, manipulation, or transformation of language, making certain words, phrases, or meanings obsolete over time. It is a language that cancels itself over time using self-consuming concepts. What is left of the once-powerful ideas are just tautologies and nonsense. Just as physical products are made to wear out or become unfashionable to drive continuous consumption, language can be shaped to favour constant renewal and proliferation at the expense of clarity and durability. This guarantees endless knowledge production and linguistic consumerism. This phenomenon reflects a preference for quantity over quality, as those who shape language—writers, media, publishers, politicians, educational institutions, etc.—may prioritise the relentless production of content over the refinement of meaningful communication. But does planned obsolescence extend beyond a human profit-driven strategy to something inherent in natural laws of entropy and dissipation? When applied to language, this theory suggests that language evolves and decays much like any physical system. Entropy, the principle that systems move toward disorder, could explain how languages become increasingly complex or fragmented over time, necessitating renewal or replacement. By continuously introducing new linguistic forms, jargon, or frameworks, the complexity of communication increases, ensuring that only those with access to certain information can fully participate. This dynamic not only drives profit by creating a market for language products but also reinforces authority by making certain forms of communication inaccessible to the general population. As a result, language shifts from a tool for effective communication to a commodity that must be constantly consumed, upgraded, and replaced. Those who control the production and dissemination of language—such as government institutions, media, and corporations—benefit by remaining gatekeepers of communication, while society is left with a constantly shifting linguistic landscape that prioritises consumption over clarity. The result is a linguistic environment where the rapid turnover of empty ideas and fake expressions is encouraged, often leading to a degradation of clear and simple language. In contrast, one might consider the value of investing in 'handcrafted linguistic luxury'—a focus on bespoke, custom-made private language that prioritises quality and depth over mass production. This approach values the time and effort required to craft language with care, much like the difference between mass-produced goods and artisanal creations. Instead of rushing to produce new texts every day, in language, true quality demands patience and deliberate craftsmanship, rather than the haste of constant output.

Economic theory of obsolescence

Jeremy Bulow's 1985 paper, titled 'An Economic Theory of Planned Obsolescence',[25] examines how firms deliberately design products with a limited useful lifespan to increase future sales. The theory suggests that manufacturers intentionally create goods that will become non-functional after a certain period, compelling consumers to buy upgrades. Bulow presents a framework for understanding how planned obsolescence can influence economic outcomes, particularly in monopolistic or highly competitive industries. The notion of planned obsolescence in language, therefore, raises important questions about the balance between linguistic quantity and quality. Just as the technology cycle is constrained by design time, the creation of meaningful language is limited by the time it takes to develop and refine ideas. By focusing on durability, clarity, and the repairability of language—much like advocating for sustainable practices in product design—people can push back against the forces that drive linguistic obsolescence and work towards a more thoughtful, sustainable approach to communication. This shift would favour long-term understanding and connection over the fleeting satisfaction of novelty, much like choosing a handcrafted item over a disposable one. The planned obsolescence of language refers to the deliberate erosion or manipulation of language, where certain words, phrases, or meanings are systematically phased out or redefined to suit new cultural trends, political agendas, or commercial interests. Much like with technology, this process creates a kind of linguistic waste—words and ideas that are discarded and forgotten as quickly as they are created, leading to a dilution of cultural depth and historical continuity. The socio-cultural impact of this linguistic obsolescence and waste is profound. Language is a living archive of human experience, a repository of cultural knowledge and identity. When language is manipulated and eroded, entire communities can lose touch with their heritage and history. The constant churn of linguistic trends fosters a culture of disposability, where the emphasis is on novelty and surface-level communication rather than on preserving the richness and diversity of our linguistic heritage. This not only weakens the ties that bind communities together but also diminishes our collective ability to engage in meaningful discourse. From the perspective of a semantic environment, the planned obsolescence of language parallels the wasteful practices seen in consumer culture. The relentless production of new language forms, whether in media, advertising, or academia, often serves to generate more consumption—of products, ideas, and content—while leaving behind a trail of linguistic debris. This contributes to a broader culture of overconsumption, where resources are expended on the creation of transient, disposable content rather than on sustaining and enriching the cultural ecosystem. To mitigate the socio-cultural and semantic impacts of linguistic obsolescence, people must adopt a more sustainable approach to language. This means valuing linguistic durability and promoting the preservation and revitalisation of endangered languages and dialects. It also involves fostering spaces for thoughtful, reflective communication that resists the pressure for constant novelty and instead honours the depth and history embedded in our words. In the same way that a circular economy seeks to extend the life of physical products through reuse, repair, and recycling, a sustainable approach to language would prioritise the conservation of linguistic resources, ensuring that cultural and intellectual

[25] Bulow, J. (1985). An economic theory of planned obsolescence. Chicago: Center For The Study Of The Economy And The State, University Of Chicago.

heritage is not lost in the relentless drive for the new. By doing so, people can create a more resilient and culturally rich society, one that values the enduring power of words and ideas over the fleeting allure of linguistic trends. Jeremy Bulow's theory can be reimagined as 'A Linguistic Theory of Planned Obsolescence', where language is intentionally manipulated and obscured for profit and increased linguistic output rather than clarity and quality.

Linguistic theory of planned obsolescence

Abstract:

This theory examines how language creators intentionally foster linguistic obsolescence to drive continuous consumption of new language products. Instead of prioritising clarity, simplicity, and quality in communication, these stakeholders perpetuate a cycle of complexity, jargon, and neologisms. This cycle is designed to maintain and increase demand for new linguistic outputs, leading to a proliferation of content that is often opaque and convoluted, rather than easily understood.

Introduction:

Language is a powerful tool for communication but can be easily manipulated to serve economic and institutional interests rather than the public good. This theory explores how the deliberate complication and constant evolution of language serve as a strategy to increase production and maintain control over the flow of information. By creating linguistic products that quickly become obsolete or difficult to understand, these stakeholders ensure a steady demand for new materials, thereby sustaining their own relevance and economic gain.

Mechanisms of Linguistic Obsolescence:

1. Intentional Complexity: Creators of language products, such as academics, journalists, and politicians, often introduce complex jargon, acronyms, and specialised terminology. This intentional complexity makes older materials quickly seem outdated or irrelevant, compelling consumers to seek out the latest works to stay 'up to date'. The more complex and esoteric the language becomes, the greater the demand for new interpretations, explanations, and updates.

2. Rapid Innovation in Language: The relentless introduction of novel words, phrases, and linguistic trends creates a sense of urgency and novelty. Like how innovative technology models are released frequently to replace older ones, language is continuously updated with new terminologies that make previous expressions seem old-fashioned or inadequate. This strategy ensures that language consumers must constantly purchase new materials, attend new seminars, and follow new discourses to remain linguistically competent.

3. Institutional Endorsement of Change: Educational institutions and publishers play a crucial role in endorsing and propagating linguistic obsolescence. By frequently revising curricula, updating textbooks, and promoting new academic works, they reinforce the idea that language is a dynamic, ever-changing entity. This creates a perpetual market for new editions of textbooks, updated courses, and revised reference materials, ensuring continuous revenue for those involved in the production and distribution of language.

4. Media Amplification: The media serves as a powerful amplifier of linguistic trends and innovations. By adopting and popularising new language forms—whether through news, entertainment, or social media—media outlets contribute to the perception that language must constantly evolve. This not only drives demand for the latest content but also creates a culture where older forms of expression are quickly discarded or ridiculed, furthering the cycle of planned obsolescence.

4. Political and Corporate Exploitation: Politicians and corporate entities exploit language obsolescence to shape public discourse and maintain control over narratives. By introducing new buzzwords, policy terms, and marketing language, they can manipulate public perception and discourse. This manipulation ensures that the language of previous administrations or product cycles is quickly forgotten and replaced by new terminology that requires fresh understanding and interpretation, thus driving demand for new political or corporate messaging.

Impacts of Linguistic Obsolescence:

The constant production of new language forms can lead to a dilution of meaning and a decline in the quality of communication. As language becomes more complex and fragmented, the average person's ability to communicate clearly and effectively diminishes. The emphasis on novelty over clarity results in a populace that is more confused and less able to engage in meaningful discourse.

Just as planned obsolescence in products leads to economic exploitation, so too does linguistic obsolescence. Consumers of language—whether students, professionals, or the public—are compelled to spend money on new books, courses, and materials to keep pace with the latest linguistic trends.

As language becomes more specialised and compartmentalised, different segments of society may begin to speak in increasingly divergent ways, leading to social and cultural fragmentation. The constant evolution of language can create barriers to communication between different generations, social classes, and professional groups, exacerbating divisions within society.

Conclusion:

The planned obsolescence of language is a deliberate strategy employed by various stakeholders to maintain economic and institutional power. By fostering a cycle of constant linguistic innovation and complexity, these stakeholders ensure a continuous demand for new language products, at the expense of clarity and quality in communication. This strategy not only drives profit but also reinforces the authority of those who control the production and dissemination of language. As a result, society is left with a language that is less about effective communication and more about sustaining a perpetual cycle of consumption and control.

The illusion of commodification

The reimagined 'Linguistic Theory of Planned Obsolescence' highlights how language, much like consumer products, can be subject to planned obsolescence, driven by the interests of those who benefit from continuous linguistic innovation and complexity. This 'lingo-economic' theory could be extended to include how language in politics, marketing, and academia often evolves not to improve understanding, but to confuse, control, or exclude. Maybe, just as planned obsolescence in products generates profit and dependency, the obsolescence of language ensures that power structures remain intact, as those who cannot keep up with the latest linguistic trends are left out of critical discourse. Just as systems governed by entropy eventually reach a state of collapse and transformation, language systems—if burdened by complexity, overuse, and manipulation—might similarly break down. This breakdown could then lead to a new equilibrium in language, through the emergence of simpler or more universal forms of communication. Language is a living system and has mechanisms to protect itself and society. When it becomes overly corrupted by doublespeak, there is often a natural push for renewal—a reset. This renewal can be seen as part of a 'planned obsolescence of language'

where outdated and manipulative forms of communication are eventually discarded, allowing for the emergence of clearer, more direct language. This cyclical renewal may act as a safeguard, protecting humans from the overreach of power and the environmental or social consequences of large, disconnected societies. In this way, language contains a kind of 'kill switch' that activates when its misuse threatens to destabilise society or the environment. Humans, not naturally adapted to live in such vast, power-driven societies, may rely on these linguistic shifts to restore balance, ensuring that communication remains a force for connection and understanding, rather than manipulation and control. What is planned obsolescence? It is not just planning to fail, but rather designing systems with an expiration date, ensuring their eventual breakdown. It is a design of a failure. Everything built by man has a built-in kill switch. Language is like a house of cards.

The widespread portrayal of language as a commodity reflects a broader shift in global political-economic thinking, where all human activity is reframed in terms of exchange, value, and market logic. Yet calling language a 'commodity' is more metaphor than material truth. Language, unlike manufactured goods, is not produced through labour in the capitalist sense—it does not contain congealed labour nor emerge from formalised production processes. It only 'appears' commodified due to the fetishism intrinsic to capitalism, where symbols of value displace their material roots. The notion of a 'linguistic market', highlights how language varieties are socially ranked, assigned prestige, or marketed as assets. But this ranking functions more as ideology than as economic substance. Scholars drawing from Marxist political economy argue that commodities have value only through the labour invested in their production. Language, on the other hand, precedes markets and labour relations. It is a social and symbolic system, shaped over generations, not manufactured for exchange. Much of the literature on the commodification of language treats it as a discursive process—language is valued based on desire, utility, or symbolic capital. This view aligns implicitly with neoliberal ideals that reduce all human capacities to marketable skills, dissolving the distinction between being and appearing. In this framing, languages and speakers are repackaged as bundles of competencies, ready to be sold. However, if the production of real commodities is tied to material labour, then language—without that production process—remains outside this definition. 'Intellectual labour' primarily involves mental effort, such as thinking, analysing, and problem-solving, so it is a part of language. This effort to produce words in a form of copywriting or intellectually mundane jobs cannot be separated from their authors completely. The products of language will always bear the biases of their creators and re-creators. Every word can be ideologically charged, and this is an obstacle for commodification. The illusion of language as a commodity results from removing labour from the concept of value and mistaking visibility for substance. Words are empty containers that always refer to something else, while commodities have an intrinsic value and materiality. A 'commodity'(n.) means 'benefit, profit, welfare;' also 'a convenient or useful product', from Latin (nominative) commoditas 'fitness, adaptation, convenience, advantage'. Words can be convenient and useful, but are just means towards benefit, profit, and welfare. A clearer understanding of obsolescence in language requires reconnecting linguistic analysis to the material realities of life—not merely discourse.

2.2. Critique of communication

Superficiality of information

In 'Critique of Information'[26], Scott Lash offers a penetrating analysis of the information age, highlighting the commodification and overwhelming proliferation of data that shape our contemporary world. Extending Lash's critique to the realm of language reveals a similar phenomenon where linguistic overload reflects information overload. Words, phrases, and linguistic trends are deliberately engineered to become obsolete, driving a relentless cycle of consumption that mirrors the excesses of the information economy. Lash contends that the information age has inundated us with a torrent of data, much of it devoid of meaning or substance. This critique is equally applicable to language, where the unceasing production of books, articles, speeches, and media content has created a linguistic landscape characterised by overwhelming excess. Just as the flood of information can desensitise and overwhelm, the constant churn of language erodes our ability to communicate effectively and meaningfully. The emphasis on quantity over quality—where creators of language prioritise sheer volume over clarity and depth—has resulted in a society awash in words yet often lacking true understanding or insight. Much like Lash's critique of the superficiality of modern information, we must scrutinise the superficiality of language that is designed to quickly become obsolete. This obsolescence drives a never-ending cycle of linguistic consumption, where words and ideas are discarded as soon as the next trend emerges. What are the economics of linguistic obsolescence? Exploration of the information economy can be likened to the economics of language production, where language itself is treated as a disposable commodity. The planned obsolescence of language is no accident; it is a calculated strategy to keep consumers perpetually engaged with the latest linguistic trends, ensuring a steady flow of revenue for those who produce and distribute language. This approach has profound consequences. As language is constantly updated and repackaged, older forms of expression are cast aside, often before they have had the opportunity to fully mature or be thoroughly understood. This stifles meaningful discourse and creates a culture that sacrifices depth and longevity in communication for the sake of novelty and profit. What are the social costs of linguistic saturation? When society is bombarded with an excess of language—much of it shallow or ephemeral—it becomes increasingly difficult for individuals to discern what is profoundly important or meaningful. The planned obsolescence of language exacerbates this problem, encouraging a focus on transient trends and terminologies rather than on enduring principles of clear and honest communication. This linguistic saturation carries significant social costs. It breeds confusion and disorientation, as the ever-changing influx of new language makes it difficult to keep up with or fully grasp contemporary discourse. It undermines social cohesion, as diverse groups within society adopt divergent linguistic trends, leading to fragmentation and a lack of shared understanding. Moreover, it diminishes the power of language to inspire and mobilise, as people grow numb to the endless stream of words that inundate them daily. As a call for linguistic reflection, Scott Lash's 'Critique of Information' provides a compelling framework for understanding the challenges of the information age. When applied to language, his insights expose the dangers of a culture that prioritises rapid linguistic production and consumption over

[26] Lash, S. (2002). Critique of Information. SAGE.

the quality of communication. The planned obsolescence of language is symptomatic of a deeper issue—a society that values profit and novelty over clarity and meaning. Reflecting on Lash's work reminds us of the need to reclaim language from the forces that seek to commodify and dilute it. But what if these forces are stronger than people? What if the nature of knowledge is ephemeral and information is doomed to die?

Information as rubbish

In Erik Sherman's 'Everything Dies, Including Information'[27], the transience of knowledge and the inevitable decay of information in the digital age are laid bare. The article serves as a poignant reminder that, much like physical objects and civilisations, knowledge too has a finite lifespan. Despite our advances in digitisation, which offer a semblance of permanence, the forces of entropy and obsolescence remain inexorable. This narrative of decay is deeply intertwined with the fragility of language, echoing the impermanence of information. Sherman paints a bleak picture of our current technological landscape, where digital storage systems, though remarkably dense, are alarmingly fragile. Information stored today may become unreadable within a few years, requiring constant migration to new formats to stave off oblivion. This mirrors the obsolescence of language, where the rapid turnover of linguistic trends and terminologies leaves older forms of expression to fade into obscurity, often before they have fully matured or been comprehensively understood. Archivists now face the Herculean task of managing an unprecedented flood of information, much of which is recorded indiscriminately. This deluge complicates the preservation of knowledge, as it becomes increasingly difficult to discern what should be saved and how. Similarly, in the linguistic realm, the overwhelming production of content—often driven by the need for novelty and profit—results in a saturation that dilutes meaningful communication. As Sherman notes, the entropy of information is ever-present, waiting in the wings to erase what has not been carefully preserved. The planned obsolescence of language carries profound socio-cultural implications. In a world where linguistic trends are constantly evolving, older forms of expression are rendered obsolete, often before they have had the chance to contribute meaningfully to the cultural discourse. This not only stifles the depth and richness of communication but also fragments society, as distinct groups adopt divergent linguistic trends, leading to a loss of shared understanding. Moreover, the incessant churn of language mirrors the broader commodification of communication, where words and phrases are treated as disposable commodities, designed to be consumed, and replaced as quickly as possible. This has a corrosive effect on the power of language to convey truth, foster understanding, and build social cohesion. The sheer volume of information—and by extension, language—leads to a kind of cultural amnesia, where significant ideas and expressions are lost in the noise, leaving behind a society that is increasingly disconnected and disoriented. Just as the physical and digital artefacts of our civilisation are at risk of disappearing, so are the words and ideas that define our cultural and intellectual heritage. To combat this, we must embrace a more reflective and sustainable approach to communication—one that values the enduring power of language to convey simple meaning, build human relations, and foster clear understanding in an increasingly fragmented world.

[27] Sherman, E. (2022) Everything dies, including information, MIT Technology Review. Available at: https://www.technologyreview.com/2022/10/26/1061308/death-of-information-digitization/ (Accessed: 21 August 2024).

'Information has become a form of garbage, not only incapable of answering the most fundamental human questions but barely useful in providing coherent direction to the solution of even mundane problems. To say it still another way: The milieu in which Technopoly flourishes is one in which the tie between information and human purpose has been severed, i.e., information appears indiscriminately, directed at no one in particular, in enormous volume and at high speeds, and disconnected from theory, meaning, or purpose'.
— Neil Postman, Technopoly: The Surrender of Culture to Technology

The promise of misunderstanding

In John Durham Peters' 'Speaking into the Air: A History of the Idea of Communication'[28], the introduction delves into the complex and often fraught nature of communication, examining how the concept has evolved and why it has become central to modern existence. Peters critiques the notion that communication is simply a tool for mutual understanding, arguing instead that it often reveals more about our failures and the inherent barriers between individuals. The modern fixation on communication, he suggests, stems from a deep-seated anxiety about our ability to truly connect with one another—a concern that has only intensified with the rise of new communication technologies. Peters traces the intellectual lineage of communication, highlighting how it has come to embody both the utopian ideal of perfect understanding and the dystopian reality of persistent miscommunication. The myth of communication as an idealised communion of souls is a fantasy. Instead, communication frequently fails, leaving individuals isolated despite their best efforts to connect. This sense of failure is not just a modern phenomenon but has roots in historical moments and technological advances that have reshaped how we think about human interaction. The concept of communication is tangled with intellectual and cultural strands that reflect our era's struggles with itself. It is a term that carries with it a history of hopes and disappointments, symbolising the human desire for connection while simultaneously acknowledging the ever-present risk of miscommunication. The introduction emphasises that communication is not just a simple exchange of information but a complex process fraught with the potential for misfires and misalignments. Communication is often marked by impasses and breakdowns. The historicity of communication means that our contemporary understanding of communication is shaped by specific historical conditions and technologies. Peters draws on Walter Benjamin's distinction between historicism and historical materialism to illustrate how the past is not a fixed, linear sequence but rather a series of ruptures and alignments that resonate with the present.

Communication, as we understand it today, was made possible by the advent of technologies like the telegraph and radio, which redefined the concept of a quasi-physical connection that could transcend the limitations of time and space. The meaning of the word 'communication', has also evolved over time. Originally rooted in the Latin 'communicare', meaning to share or make common, the term has come to encompass a wide range of activities, from the exchange of messages to the transmission of thoughts and ideas. Peters argues that the

[28] John Durham Peters (2000). Speaking into the air : a history of the idea of communication. Chicago: University Of Chicago Press.

modern emphasis on communication as a means of achieving mutual understanding is a recent development, one that has been shaped by the demands of mass communication and the rise of new media. The critical examination of communication presents it as both a cultural ideal and a source of deep-seated anxiety. People are challenged to reconsider the assumption that better communication will necessarily lead to better understanding and allow instead that communication is often a site of struggle and conflict. By tracing the historical and intellectual roots of our current communication dilemmas, we should question the very foundations of how we think about human connection in the modern world. The quest for genuine communication is a complex, often elusive pursuit that goes beyond the mere exchange of information to touch the very essence of human connection. Our discussions of communication often focus on the technicalities of conveying information, but at its heart, communication is about bridging the human divide, understanding others, and fostering community. In every act of communication, there lies an element of risk—the possibility of misunderstanding, the challenge of conveying one's thoughts and feelings across the chasms of individual experiences and perceptions. Yet, it is precisely this challenge of miscommunication that makes communication so vital and so central to the human experience. It is not merely a mechanical transfer of information but an art form that necessitates empathy, creativity, and a deep respect for the other.

Eutopia of communication

What are the optimal achievements of language? Where is the 'eutopia' of communication? ('Eutopia' is an achievable good place, while 'utopia' refers to an imagined place of ideal felicity that does not exist.) Insights from Geoffrey West's lectures[29] on the universal laws governing complex systems offer a compelling framework to support this argument. In the quest to understand how language can best serve humanity, one might argue that the ultimate goals are simplicity and unity. These concepts, when applied to language, provide a foundation for clear communication, social cohesion, and the prevention of harm. Why are simplicity, clarity, and accessibility so important for optimal communication? Geoffrey West's exploration of scaling laws, as discussed in his lecture on 'The Universal Laws of Growth, Innovation, and Sustainability', underscores the importance of efficiency in complex systems. He explains that as systems—whether they be cities, companies, or empires—grow, they must optimise their use of resources to remain sustainable. This principle applies to language as well. Just as a city must streamline its infrastructure to support a growing population, language must be simple to ensure that communication remains clear and accessible. Overly complex language, like inefficient infrastructure, can lead to breakdowns in communication, alienating individuals and creating barriers to understanding. The metabolic rate of organisms and systems must increase with size, requiring faster innovation to avoid collapse. Similarly, language needs to be efficient, allowing for quick and accurate communication. Simple language, like a well-functioning metabolic system, promotes adaptability by enabling ideas to be shared and understood swiftly, fostering collaboration and decision-making in dynamic environments. The role of networks and connectivity within cities can be applied to the concept of language as a social network. Simplicity in language

[29] Joshua Spodek. (2018). 084: Geoffrey West, part 1: Simplicity beneath it all (transcript). [online] Available at: https://joshuaspodek.com/084-geoffrey-west-part-1-simplicity-2 [Accessed 11 Sep. 2024].

strengthens these networks by making information accessible to everyone, regardless of their background or education. Just as a city thrives when its infrastructure connects all its inhabitants, a society thrives when its language connects all its members. This inclusivity is crucial for maintaining social cohesion and ensuring that diverse populations can participate fully in the exchange of ideas.

The principles of a 'eutopian' community are unity, cohesion, and shared identity. However, growth can challenge the cohesion of complex entities like cities and empires. As these complex systems expand, maintaining unity becomes increasingly difficult. In the context of language, unity is the glue that holds societies together. A shared language fosters a collective identity, much like a city's infrastructure fosters a sense of community. When people share a common language, it creates bonds that transcend individual differences, much like the shared infrastructure of a city that connects its diverse inhabitants. When the number of language users grows, the unity and shared identity diminish. A unified language ensures that complex social, cultural, and ideological networks remain strong. Language serves as the medium through which shared meaning is conveyed, allowing for a collective understanding of values and ideas. This shared meaning is essential for building trust and cooperation within a society, much like the networks that sustain a city or an economy. The finite lifespan of systems emphasises the risks of fragmentation as complexity increases. Just as a city or empire can collapse if it fails to maintain its infrastructure or governance, a society can fracture if its language becomes fragmented. A unified language mitigates this risk by providing a common platform for dialogue, preventing the divisions that can arise when separate groups within a society speak different languages or dialects. The challenges faced by expanding dominant languages highlight the importance of balancing simplicity and complexity in preventing the disintegration of complex entities, be they cities or empires. While simplicity and unity in language are essential for social cohesion, there is a need for complexity in certain contexts. Just as cities require complex infrastructure to support their growth, specialised fields require precise language to express nuanced ideas. The challenge lies in balancing this complexity with the broader need for simplicity and unity, ensuring that specialised language does not create divisions or alienate people from the shared linguistic network. Drawing on Geoffrey West’s insights into the dynamics of growth and sustainability in complex systems, we can see that simplicity and unity in language are analogous to the optimisation of resources and the maintenance of networks in cities and countries. Just as these systems must remain efficient and cohesive to survive, language must remain simple and unified to prevent harm and foster a healthy, functional society. Simplicity ensures clarity and accessibility, while unity maintains social cohesion and shared meaning.

2.3. Size and duration of meaning

Systematics of size

How does the size and longevity of a linguistic community influence the nature of language and the meaning of its words? Could the systematic rise and fall of empires lead to the decay of language? And does this suggest a potential threat of technocratic collectivism and the fate of humanity? In Rein Taagepera's 1978 work[30], 'Size and Duration of Empires:

[30] Taagepera, R. (1978). Size and duration of empires: Systematics of size. Social Science Research, 7(2), pp.108–127. doi:https://doi.org/10.1016/0049-089x(78)90007-8.

Systematics of Size', we delve into the cyclical rise and fall of empires through the meticulous charting of historical expansions and contractions. Taagepera's analysis, underpinned by detailed charts, reveals the fluctuating dominion of these colossal entities over millennia, illustrating their sprawling reaches at different epochs. This progression is not continuous but punctuated, marked by quantum leaps in territorial dominion corresponding to breakthroughs in administrative technologies and governance methodologies. These cycles reflect a dynamic interplay between the stabilisation around a mean size and abrupt increases in scale due to technological and administrative innovations. Societal structures manifest in discrete clusters rather than continuous distributions. Societies leap from the familial bands to tribes, then to chiefdoms, and onward to states, each jump facilitated by a critical mass that necessitates new forms of social organisation and conflict resolution. These theoretical frameworks underscore a broader, more systemic view of human organisation, suggesting that the size and complexity of social structures—from the smallest bands to the mightiest empires—are constrained not just by physical resources but by the capacities of governance and communication technologies. As these capacities expand, so too does the scope of effective control and cultural coherence within an empire. This phenomenon of expansion leading to collapse parallels the fate of language and ideas, which, while striving to encapsulate increasingly complex realities, eventually yield to obsolescence. The lexicon and models are emblematic of this transient efficacy, initially apt yet destined for eventual supersession by novel paradigms and understandings. The scope of a concept or term often predicates its impact, yet such impact is inherently ephemeral. The longevity of any given idea or term—its temporal relevance—is similarly bounded. Revolutionary concepts can become stale as newer, more robust frameworks emerge. The language that once adeptly ruled vast empires might now seem archaic or insufficient against new power discourse. Our communicative tools are subject to the same cyclical rise and fall as the empires they once defined. While we can approximate the durability of certain phrases or ideas based on their present utility and the cultural context, all linguistic concepts are temporal constructs facing inevitable obsolescence. The vocabulary and notions we employ to grasp our world are as fleeting as the empires. As these empires ascended, flourished, and waned, so too will the meanings we derive from them. This reflection on the ephemeral nature of both imperial and semantic constructs underscores that both the magnitude and the longevity of our understandings are indelibly tied to the contexts of their inception, all constrained by the inexorable march of time. In conclusion, Taagepera’s insights, while rooted in historical analysis, offer a profound allegory for the lifecycle of the very concepts we use to understand human history. The evolution of empires is mirrored in the evolution of academic discourse, with each bound by the inevitable march toward greater complexity and eventual obsolescence. If the word empire (n.) means 'territory subject to an emperor’s rule', then in today’s world, is not the official language of a country the true “emperor” to which the territory is subject? The real ruler is keeper of all written history, traditions, statistics, laws, ideas, philosophy, and literature in the state. Whoever controls the general language and its flows controls the territory determines the empire’s life cycle. The vitality of this language as a living system for interaction and the exchange of new ideas shapes both the scale and the lifespan of empires. When the language becomes “dead,” like Latin, the empire it once sustained—like Rome—dies with it.

Linguistic innovation

The ephemeral nature of empires and the lexicons that delineate them are elegantly mirrored in Geoffrey West's work, 'Scale: The Universal Laws of Growth, Innovation, Sustainability, and the Pace of Life in Organisms, Cities, Economies, and Companies[31]'. West delves into the foundational laws that orchestrate the expansion and persistence of complex structures, shedding light on the temporal dimensions of human ambitions. West posits that scale laws—universal tenets applicable across biological entities, urban centres, corporations, financial systems, and languages—illuminate why certain entities prosper while others falter. Echoing Taagepera's insights on the ascension and decline of empires via the metrics of size and duration, West broadens this spectrum, asserting that the vitality of any system, empires included, hinges crucially on its resource utilisation efficacy, innovation capabilities, and operational tempo. Within imperial contexts, West introduces the concept of 'economies of scale', illustrating how magnified systems, be they metropolises, corporations, or empires, derive increased efficiency through expansion. Yet, this augmentation invariably escalates the challenge of maintaining a unified language, ideology, and purpose across sprawling territories. As empires swell, they grapple with escalating complexity and an augmented risk of disintegration. The 'pace of life' in urban and corporate environments is equally applicable to empires. System growth necessitates accelerated innovation and adaptability. For empires, continual innovation is crucial for managing vast lands and a diverse populace. The cohesion of an empire, maintained through shared ideologies and languages, is directly tied to its adaptive capacity. When innovation wanes and the operational tempo stalls, the integrity of shared meanings deteriorates, precipitating instability and decline. Sustainability and growth limitations offer a vital perspective on imperial downfalls. All systems encounter inherent growth boundaries that demand significant innovation or face potential collapse. For empires, this denotes a critical juncture where expansive size becomes unsustainable absent a parallel evolution in governance, communication, and ideology. A waning common language and the dilution of shared meanings indicate surpassing these growth thresholds. This analysis underscores the role of innovation in extending the lifespan of complex systems. Analogous to how corporations must incessantly innovate to remain competitive, empires require continuous cultural and ideological renewal to uphold unity.

When the generation of new concepts, linguistic adaptations, and vision renewal diminishes, decline becomes inexorable. The fragmentation of language and ideology is not merely a symptom but a catalyst of decline, eroding the foundational fabric of the empire. Through this lens, the deterioration of an empire emerges as a scaling failure of meaning. Like physical growth, the capability of an empire to maintain a unified and cogent vision faces limitations as it expands. The true binding agent of empires is not merely their territorial expanse or military might, but the collective ideology, aspirational visions, and shared language that forge a unified entity. Like the rise and fall of empires, the magnitude and persistence of meaning are dictated by universal scaling laws. An empire's true strength lies not in its physical breadth but in its capacity to nurture a resonant, cohesive narrative that unifies its diverse constituencies. When this narrative unravels and the coherence of communal language

[31] West, G.B. (2017). Scale : the universal laws of growth, innovation, sustainability, and the pace of life in organisms, cities, economies, and companies. New York: Penguin Press.

disintegrates, the empire's fate is sealed. The concept of natural limits to growth holds that systems must either innovate dramatically or face collapse. This concept applies directly to the 'size' of meaning and language within an empire. As the empire grows, the shared language and ideology must scale to maintain unity. However, there is a limit to how far this can be pushed before the system becomes unsustainable. The fragmentation of language and meaning signals that these limits have been reached, leading to a decline in the empire's cohesion and eventually its power. West's 'Scale' teaches us that the expansion of language, akin to the growth of empires, must be both sustainable and adaptable, lest it inevitably lead to decline. As an empire grows, the 'metabolic rate' of its cultural and linguistic innovation must increase. This means that the empire needs to continually generate innovative ideas, adapt its language, and renew its shared narratives to maintain unity and coherence. If the rate of innovation slows down, the system (in this case, the empire) risks stagnation and decline, as it can no longer sustain the complexity required to manage its size.

Complex grammar

In 2019, researchers found that the number of people speaking a language impacts its grammatical complexity. The study[32] 'Larger communities create more systematic languages' shows that the size of a community influences how intricate the grammar of a language becomes. The researchers conducted experiments where small and large groups played communication games. They used made-up words to describe shapes moving on a screen, without relying on any known language. Over time, all groups developed new languages, but those created by larger groups were more systematic and structured, with patterns that made them easier to learn and use. The larger communities face more variations in how words are used, which can cause confusion. To overcome this, speakers develop a more organised grammar, making communication more efficient. This structured approach allows people to convey ideas with fewer words, enhancing understanding. Interestingly, this grammatical simplification might also impact human relations and emotional expression within smaller language communities. In smaller groups, where the language remains more complex, people may develop deeper connections, as the intricate grammar provides more nuanced ways to express feelings and relationships. The close-knit nature of these communities could foster more intimate communication, as the language allows for subtler distinctions in meaning. This finding not only helps explain why languages differ but also offers insight into how human relationships and social dynamics shape communication. As larger groups formed in human history, grammar may have evolved to help people communicate more efficiently in broader, less intimate settings. In contrast, smaller groups may retain more elaborate grammar, potentially preserving a richer, more personal mode of communication. Simplified languages, while making communication easier in large groups, could limit the depth of interpersonal relationships and serve the interests of power and control. In smaller communities, complex languages allow for richer emotional expression and nuanced social interactions, fostering closer connections. From a sociopolitical perspective, easy-to-learn languages favour uniformity, making it easier for those in power to control large groups. Standardised communication reduces linguistic diversity, limits subtle forms of resistance, and encourages

[32] Raviv, L., Meyer, A., & Lev-Ari, S. (2019). Larger communities create more systematic languages. Proceedings. Biological sciences, 286(1907), 20191262. https://doi.org/10.1098/rspb.2019.1262

functional over relational dialogue. Personal connection and emotional depth are sacrificed for the sake of efficiency, aligning with the interests of centralised authority.

The study demonstrates that larger communities not only create more systematic languages but also do so more quickly and consistently than smaller ones. Smaller groups tend to exhibit more linguistic variation, suggesting a higher likelihood of unique shifts in language use, often referred to as linguistic drift. More intimate groups tend to create languages that are more 'handmade' or personalised, with greater variation and subtlety, allowing for more flexibility in expression and adaptation to the group's specific needs and culture. This can result in a language that feels more intimate and nuanced, like something crafted to suit the close-knit community using it. In contrast, languages in larger communities are more like 'mass-produced' systems. They tend to be more standardised, structured, and efficient, designed to ensure clear communication across a broader and more diverse population. This streamlining sacrifices some of the delicate touch and complexity seen in smaller groups, favouring uniformity and clarity over depth and variation. The dynamics of larger communities drive the development of languages that are more structured and predictable, qualities that help ensure clear and successful communication. This highlights the significant role that community size plays in shaping linguistic structure, offering valuable insights into how social interaction scales influence the evolution of language. Larger communities tend to develop more systematic languages, but this shift toward linguistic organisation may negatively impact human relationships, emotional communication, and the sense of closeness in smaller groups. As languages evolve in larger populations, they become more structured and predictable. The 'evolution' is purely quantitative, and its goal is better control and manufacture of consent in big, diverse groups. This may come at the cost of emotional depth and personal connection that more flexible and complex languages in smaller communities foster. In narrower groups, where people interact more closely and intimately, languages often retain more variation and nuance. Larger populations require linguistic efficiency, leading to streamlined grammar and reduced ambiguity. This shift favours clarity over closeness, making language a tool for managing masses rather than expressing inner life. The result is less belonging, more conformity, and language as a mechanism of control.

Social scale

The research 'Social scale and structural complexity in human languages?'[33] explores the relationship between the size of language-speaking populations and the complexities of their grammatical structures. It highlights how linguistic elements, such as phonological systems and inflectional morphology, vary significantly across languages. Interestingly, a correlation is found that languages spoken by larger populations tend to have more extensive phonological inventories, but simpler morphological structures compared to those spoken by smaller communities. These findings emphasise the need for further investigation into how social environments shape the evolution of language grammar. Just as evolutionary biology links life expectancy and reproductive timing in mammals, human societies display adaptive behaviours driven by cultural evolution, such as social learning and behavioural flexibility, rather than purely genetic selection. The main idea is that linguistic structures are not random or isolated

[33] Nettle D. (2012). Social scale and structural complexity in human languages. Philosophical transactions of the Royal Society of London. Series B, Biological sciences, 367(1597), 1829–1836. https://doi.org/10.1098/rstb.2011.0216

developments; they are deeply influenced by the social contexts of their speakers. The linguistic community must explore how social dynamics shape grammatical systems, advancing our understanding of linguistic evolution as an integral part of cultural progression. How does population size affect language? Is it true that 'simpler grammar means larger vocabulary'[34]? A fascinating contrast emerges in language dynamics: languages spoken by large populations often have simpler grammatical structures, while smaller communities develop languages rich in structural complexity. However, larger populations tend to create expansive vocabularies, whereas smaller groups may not. This inverse relationship challenges traditional language change theories, suggesting that the spread of linguistic elements depends on how easily they can be learnt and shared.

Basic vocabulary, which can be learnt with minimal exposure, spreads quickly in large populations. Ease of diffusion is the key. Complex grammatical systems requiring frequent, in-depth interactions are more common in smaller, tightly-knit communities, where regular communication allows for mastery of these intricate rules. Where vocabulary is more focused, communication tends to be clearer and more intimate. Shared linguistic patterns and familiarity with specific terms foster closeness and trust, as individuals are more likely to understand each other's intentions and nuances. The reduced ambiguity strengthens relationships by allowing for more precise emotional and interpersonal expression. In contrast, the larger vocabulary in more expansive, systematic languages used by bigger groups may dilute this personal connection. Speakers adapt to standardised forms, but the language lacks the personalised, culturally specific elements that smaller groups cultivate, potentially leading to more superficial interactions and less deep mutual understanding. The implications go beyond linguistics, hinting at patterns in broader cultural evolution. As societies grow and become more interconnected, cultural forms—like languages—tend to simplify. Historically, richly complex cultural phenomena emerged from small, actively engaged groups. In contrast, mainstream culture, influenced by large, diverse populations, often trends toward simplicity, as seen in the structural simplicity of contemporary popular music. This highlights an important insight: the structural complexity or simplicity of a language, and other cultural expressions, is not merely a result of the number of speakers but also of how effectively these elements are communicated and transmitted within the community.

Ideological competition

The paper 'Verhulst–Lotka–Volterra (VLV) model of ideological struggle'[35] by Nikolay K. Vitanov and colleagues presents a mathematical model to analyse ideological competition within a closed population (like a state). This model draws upon concepts from population dynamics and statistical physics, focusing on the spread and interaction of ideologies within a society. In societal systems, entropy—a measure of disorder or uncertainty—plays a role in the complexity of ideological dynamics. Societal development and ideological struggles relate to

[34] Reali, F., Chater, N. and Christiansen, M.H. (2018). Simpler grammar, larger vocabulary: How population size affects language. Proceedings of the Royal Society B: Biological Sciences, 285(1871), p.20172586. doi:https://doi.org/10.1098/rspb.2017.2586.

[35] Vitanov, N.K., Dimitrova, Z.I. and Ausloos, M. (2010). Verhulst–Lotka–Volterra (VLV) model of ideological struggle. Physica A: Statistical Mechanics and its Applications, 389(21), pp.4970–4980. doi:https://doi.org/10.1016/j.physa.2010.06.032.

non-equilibrium systems like population dynamics, language extinction, and religious growth, reflecting how entropy increases through the tension between competing ideologies. Much like natural laws governing physical systems, ideologies spread and convert individuals through mechanisms of mass communication and interpersonal interactions. The entropy here manifests in how ideologies rise, collapse, or revive (the 'phoenix effect'), showing dynamic tension that reflects complex social evolution. The VLV model applied to ideological struggle adapts the classical predator-prey models from biology to a sociopolitical context. In the model, different ideologies (akin to species in a biological system) compete for followers. Two main mechanisms are considered for converting people to ideologies: unitary conversion (mass media influence) and binary conversion (interpersonal interaction). The model also allows for the emergence of ideological tensions as the number of competing ideologies grows. When only one ideology spreads, society reaches an equilibrium where some people adopt the ideology while others remain indifferent. With two ideologies, the competition for followers introduces measurable ideological tension. The steady state results in fewer followers for each ideology compared to a single-ideology scenario, due to the rivalry between them. As more ideologies are introduced, the system shows more chaotic and unpredictable behaviour, reminiscent of complex dynamical systems. Tension grows between ideologies as they vie for dominance, reflecting social entropy and increasing disorder.

An important aspect of the model is the 'phoenix effect', where an ideology that is near extinction can experience a resurgence due to environmental or social changes. This revival effect highlights the non-linear and chaotic nature of ideological competition, where slight changes in conditions can dramatically alter the outcomes, preventing the total collapse of an ideology and allowing it to affect the population once again. The paper underscores the relevance of modelling societal dynamics, especially the competition between ideologies, using principles from physics and mathematics. The VLV model captures the complexity and unpredictability of ideological struggles, where ideologies may rise, compete, collapse, and revive in a dynamic system governed by laws akin to those in nature, reflecting the entropic growth of disorder in ideological conflicts. The ideological clash described in the study can be seen as a form of manufactured disorder, particularly when viewed through the lens of entropy and societal dynamics. The model illustrates that ideological competition inherently creates tension and instability within a population. As multiple ideologies vie for followers, their interactions generate complexity and conflict, which can lead to increased social disorder. This 'manufactured disorder' emerges naturally from the dynamics of ideological competition, as different ideologies attempt to convert individuals through both mass communication (unitary conversion) and interpersonal interactions (binary conversion). The introduction of additional ideologies into a closed system amplifies this disorder, making the system more chaotic and unpredictable—like how entropy increases in a thermodynamic system when energy is spread over more microstates. The social and environmental factors that enable such a resurrection suggest that even after periods of apparent stability, latent ideological tensions can quickly lead to new forms of semantic disorder. In this way, ideological clash does manufacture disorder, not necessarily through external manipulation, but through the inherent dynamics of competition and tension between ideologies, which act as a driving force for societal instability and loss of meaning.

3. Semantic equilibrium

3.1. Entropy of language

Systematic distortion of communication

What are the signs of societal collapse in a language? In his seminal 1893 text, 'The Division of Labour in Society', Émile Durkheim examines the societal role of institutions, differentiating between their normal and pathological functions, albeit acknowledging that interpretations of 'normality' can vary across cultures. Building on this tradition, Robert Merton applied the functional method to scrutinise social institutions, categorising their functions and dysfunctions as either manifest or latent. This approach aligns closely with Jürgen Habermas's notion of 'systematic distortion of communication' and the concept of 'communication entropy' defined by Claude Shannon and Warren Weaver. The functional method is instrumental in uncovering these latent dysfunctions and elucidating the process of entropy in communication. Originally introduced by German physicist Rudolf Clausius in 1865, the term 'entropy' describes the progression toward disorder and energy dissipation within a material system, a principle encapsulated in the second law of thermodynamics. By 1949, Shannon and Weaver had adapted this concept to communication, describing entropy as the predictability level or the expected average information in communication exchanges. This entropy indicates a natural trend toward increased disorder in closed communication systems, leading to diminished information clarity and systemic dysfunctionality. This phenomenon is evident in the manufacturing of dissent within communication systems, a disorderly form that destabilises the system, contrary to the order sought through consensus. The claim that entropy in communication leads to information loss and reduced efficacy[36] raises the question of whether the language's primary goal is to disseminate information efficiently or merely to capture attention, regardless of clarity. This entropy begins when one message is chosen over another, perpetuating with every subsequent modification, suggesting an inevitable decline in message intelligibility. This decline in communicative clarity and the consequent rise in entropy are linked to the latent dysfunctions within the system, where increased disagreement and censorship, as seen in totalitarian states, exacerbate systemic entropy. The only mitigation is to ensure the communication system remains as open as possible, embracing a wide array of messages and minimal intermediary intervention. The Internet exemplifies this, offering a lower entropy environment compared to traditional mass communication systems due to its capacity for direct, unmediated connections among individuals. In 'The Unanticipated Consequences of Purposive Social Action', Robert Merton[37] explored these dynamics, associating entropy with the unintended consequences and latent dysfunctions of communication systems in his discussion on the unforeseen outcomes of purposive social actions. Merton critiqued the hubris of educated elites who believe they can completely control complex systems, warning of the inevitable unforeseen and often undesirable consequences of such interventions. Merton's analysis underscores that while societies often strive for functional harmony, the reality is frequently more complex, with potential benefits and detriments varying widely across different social segments. This understanding challenges the notion that societal functions necessarily contribute positively to all community members,

[36] Merrill, John Calhoun. Lee, John. Friedlander, Edward Jay(1990). Modern Mass Media, Harper & Row.
[37] Robert King Merton (1936). The Unanticipated Consequences of Purposive Social Action.

illustrated starkly by the systemic dysfunctions during South Africa's apartheid. An example of a situation where societies may not function equally well for everyone highlights that societal ideals cannot be trusted to work universally. What may be functional for some can be dysfunctional for others. A truly effective communication system should aim to foster feelings of consent and unity among all members of society as much as possible. To assess whether positive functions outweigh dysfunctions (or vice versa), Merton introduces the concept of the 'net balance'. However, since this societal balance or semantic equilibrium relies on subjective judgment, it is impossible to objectively quantify and compare the positive functions and dysfunctions to determine which predominates. In summary, the functional analysis of communication systems, while often criticised as conservative, fundamentally seeks to discern how societal stability can be maintained amidst the flux of changing ideals and information entropy. This approach requires a nuanced understanding of how societies manage the inherent tensions between unity and diversity, order, and disorder. In an era of rapid technological change and global connectivity, entropy in language dissolves meaning into noise and erodes its shared framework. Such breakdown mirrors and accelerates the collapse of the institutions and bonds it once upheld.

Paucity of informativeness

What is a 'semantic equilibrium[38]'? To what extent does everything depend on definition? How do people navigate the labyrinth of linguistic ambiguity? Humans define concepts subjectively, with these definitions being relative to the individual and their specific context, rather than being absolute or universal. Semantic entropy serves as a barometer of ambiguity and the paucity of informativeness in language. This lexical characteristic can influence any domain where the meaning of words is pivotal. As a concept borrowed from physics, entropy measures the degree of uncertainty or disorder within a system. Applied to linguistics, it gauges how effectively a word reduces uncertainty in communication, impacting cognitive processes. This concept extends to the realm of natural language generation, offering a fresh perspective by assessing uncertainty in terms of meanings, not just word sequences. The notion of 'Semantic Equilibrium' hinges on subjective definitions crafted by humans, which are inherently relative and shaped by specific cultural and situational contexts. In the sphere of data management, what becomes evident is the communal nature of terminology—no single definition can be universally mandated within an organisation. Instead, the effectiveness of data governance lies in highlighting diverse interpretations of a concept, allowing for a natural consensus to form over time. This iterative process eventually stabilises, reaching a state of 'semantic equilibrium' where a preferred definition crystallises from the myriads of professional perspectives, though it remains subject to evolution as contexts change. This exploration of semantic entropy highlights the transient nature of language and its definitions, underscoring the planned obsolescence inherent in linguistic constructs as they continuously adapt to new informational needs and communal understandings. 'The entropy in language[39]' is used to quantify disorder and mirrors the inevitability of increasing chaos in isolated systems. It measures linguistic uncertainty. If

[38] Cedric Berger, P.M. (2021) Semantic equilibrium: It all depends on the definition, LinkedIn. Available at: https://www.linkedin.com/pulse/semantic-equilibrium-all-depends-definition-cedric-berger/ (Accessed: 15 August 2024).

[39] Lo, J. (2018). The Entropy of Language - Language Insights - Medium. [online] Medium. Available at: https://medium.com/language-insights/the-entropy-of-system-life-and-language-43d89c0d185b [Accessed 19 Sep. 2024].

language remains static, isolated from active exchange and evolution, it inevitably succumbs to obsolescence and falls into disuse. In the linguistic context, entropy manifests primarily in the ambiguity of words and phrases, encompassing both the diversity of potential meanings (semantic entropy) and the breadth of concepts a single term can cover (lexical coverage). The Efficiency versus Clarity problem refers to the trade-off between delivering information quickly and efficiently and ensuring that it is clearly understood. When messages are streamlined for efficiency, they often sacrifice some level of precision or clarity, which can lead to misunderstandings or ambiguity. This concept emphasises the challenge of balancing rapid communication while maintaining the depth and accuracy necessary for effective understanding. Languages often economise by assigning multiple meanings to single words, enhancing vocabulary efficiency but simultaneously increasing the potential for ambiguity—thus raising a language's semantic entropy. This trade-off between the economy of expression and clarity of understanding is a pivotal challenge in linguistic design. For instance, languages might use shorter, more frequently occurring phrases to streamline communication, albeit at the cost of increased interpretative challenges and slower speech rates necessary for comprehension. Conversely, reducing semantic entropy by limiting a word to a single, unambiguous meaning necessitates a larger vocabulary with potentially longer words, increasing the verbal real estate consumed in discourse but allowing for quicker speech delivery. The overall transmission speed of information remains constant across these scenarios, balancing word brevity against clarity. Predictability in discourse refers to the likelihood of which words will follow in a conversation, affecting how efficiently our brains process language. Familiar words trigger specific neural pathways, making recognition faster with repeated use. Strategies like maintaining consistent word order and using gendered nouns help reduce unpredictability by narrowing down the range of expected words. This dynamic reflects the ongoing balance between achieving communicative efficiency and maintaining clarity. As languages evolve, they navigate these forces, shaping how we express and understand meaning.

Emergence of consciousness

What is the relation between entropy, language, and the emergence of consciousness? 'The entropic theory' study[40] explores the emergent nature of consciousness from an ontological perspective, aiming to clarify the evolutionary mechanisms behind consciousness by aligning them with widely accepted scientific principles. It highlights the paradox of information behaviour within thermodynamic laws as a key framework. Like energy, information within a system is indestructible, following the first law of thermodynamics, and increases with entropy according to the second law. As entropy rises in isolated, emergent systems, information about their processes is obscured, maintaining the system’s unpredictability. The emergence of consciousness is a self-erasing process, with its developmental steps hidden from view. This implies that consciousness is an entropic necessity, rather than a result of deterministic processes, and points to the impossibility of fully replicating consciousness in machines, given the unique entropy debt required by living systems. The relationship between entropy in language and the emergence of consciousness offers a profound insight into how complex systems, whether in communication or cognitive processes, evolve. Both phenomena are shaped by the same underlying principle: the dynamic balance between order and disorder, or entropy,

[40] Lugten, P.C. (2024) ‘How entropy explains the emergence of consciousness: The entropic theory’, *The Journal of Neurobehavioural Sciences*, 11(1), pp. 10–18. doi:10.4103/jnbs.jnbs_6_24.

which drives adaptation, complexity, and uncertainty. In language, entropy reflects the degree of unpredictability or disorder within a system of communication. As languages evolve, they face a tension between efficiency (simplifying structures for ease of use) and clarity (preserving nuance and depth). High entropy in language can lead to greater ambiguity and misunderstanding, while low entropy might result in rigid, overly structured systems that stifle creativity and adaptability. The evolution of language, much like consciousness, involves a delicate dance between maintaining enough structure to ensure understanding and allowing for the flexibility needed to accommodate new meanings, expressions, and cultural changes. This linguistic entropy parallels the process by which consciousness emerges. Consciousness, as suggested by entropic theories, arises not from deterministic rules or fixed structures but from the increasing complexity and unpredictability of living systems. As organisms interact with their environment, the influx of sensory information introduces entropy into their internal systems. The brain, much like language, manages this entropy by organising and interpreting inputs, reducing local disorder while increasing global entropy in the broader system. In this way, consciousness emerges as an adaptive response to the chaotic flow of information, enabling organisms to make sense of an ever-changing world. Moreover, just as language evolves to become more efficient in handling vast amounts of information across diverse groups, consciousness evolves to process and integrate the flood of sensory data into coherent thoughts and experiences. The 'entropy debt' of consciousness—a system's need to manage the disorder that arises from constant interaction with the external world—mirrors the challenges languages face in reducing ambiguity while retaining expressiveness. Both consciousness and language are emergent systems that thrive on the balance between complexity and simplicity, using entropy as a mechanism to adapt and evolve. This connection suggests that the emergence of consciousness, like the evolution of language, is not a product of static, linear processes but an entropic necessity. As living systems become more complex, their capacity to process, organise, and synthesise information grows, leading to the development of increasingly sophisticated ways of interpreting the world. Language and consciousness are intertwined expressions of this entropic process—both systems that evolve to reduce uncertainty and manage the flow of information, but both are also prone to the unpredictability that entropy introduces. In summary, the entropic theory of consciousness offers a powerful framework for understanding how complexity and unpredictability give rise to self-awareness. When applied to language, it reveals that the evolution of communication systems mirrors the same entropic principles, highlighting the shared foundations between cognitive and linguistic development. Both processes reflect the broader dynamics of entropy, suggesting that the emergence of consciousness and the evolution of language are fundamentally linked as expressions of life's ongoing struggle to balance order and chaos.

The art of disorder

Rudolf Arnheim's essay, 'Entropy and Art: An Essay on Disorder and Order' (1971), though focused on art, discusses entropy in the context of social systems and communication. It provides a philosophical basis for understanding how order and disorder manifest in language and communication. 'The entropic decay of social systems is mirrored in the breakdown of communication structures, where language loses its precision and shared meanings become

fragmented'. Arnheim's essay[41] is a meditation on the dual forces of order and disorder, often using the concept of entropy, which originates in thermodynamics, to analyse artistic creation and perception. Entropy, in this context, refers to the tendency towards disorder or randomness within a system, while order is seen as the organising principle that brings structure and meaning to otherwise chaotic elements. Arnheim argues that art represents a deliberate effort to impose order on the inherent entropy of the universe, creating meaning and beauty through structure and organisation. Just as art imposes order on disorder, language functions as a tool to bring structure and clarity to human communication. However, when language is subject to rapid change—whether through cultural shifts, technological innovation, or intentional manipulation—this can introduce elements of entropy into the communication process. In the context of planned obsolescence, linguistic forms and norms can be deliberately phased out or altered to reflect new realities, technologies, or cultural trends. This can lead to a kind of linguistic entropy, where the stability and coherence of language are disrupted, resulting in confusion or miscommunication. Arnheim's framework suggests that as language becomes more entropic, it loses its ability to effectively convey meaning, paralleling the way art loses its impact if it becomes too disordered or chaotic. Exploration of entropy as a metaphor for disorder in art can also be applied to social systems, particularly concerning social entropy and communication dysfunctions. Social entropy, like physical entropy, refers to the breakdown of structure and order within a society. When applied to communication, this can manifest as latent dysfunctions—misunderstandings, misinterpretations, and a general erosion of effective communication. Arnheim's idea that order in art is essential to creating meaning can be extended to communication: as social entropy increases, the order within language and communication systems breaks down, leading to dysfunction. This is particularly relevant in an age where language and communication practices are rapidly evolving, often driven by technological changes. As these changes occur, they can introduce new forms of communication that may not be immediately understood or accepted by all members of society, leading to a kind of communicative entropy. In art, as in language, the deliberate introduction of disorder or the premature abandonment of established forms can result in a loss of meaning and coherence. Planned obsolescence in language could be seen as a force that undermines the stability and continuity needed for effective communication, much like how excessive entropy in art can undermine its aesthetic and communicative power.

Essential order

For comprehension to occur within the human psyche, order is essential. The organisation is evident in urban layouts, architectural designs, tool arrangements, product displays, expositions of ideas, or artistic expressions like paintings or music, which are deemed orderly when they allow an observer to discern their overarching structure and detailed ramifications. Such an order facilitates distinctions and associations, essential for grasping the entirety and its components, highlighting a hierarchy of significance and control. Order, often first recognised through sensory perception, transcends mere visual or auditory organisation to reflect deeper physical, social, or cognitive structures. Progress inherently involves restructuring, as seen in

[41] Arnheim, R. (2010). Entropy and art : an essay on disorder and order. Berkeley, Ca [Etc.] University Of California Press.

revolutions that dismantle existing orders to establish new regimes. Evolutionary biology suggests that the drive for order is innate and crucial for survival, as observed in animal social structures and natural formations. Contrary to the natural inclination towards order, the Second Law of Thermodynamics introduces a notion of inevitable increase in disorder, predicting a universal fate of maximal entropy. This principle suggests a progression from order to chaos, where energy, while conserved, becomes increasingly futile. Modern information theory paradoxically associates order with information, defining it as a state opposite to entropy. Yet, it proposes that maximum information arises from total disorder, a perplexing assertion leading to conceptual disarray. In artistic contexts, however, regularity and structure enhance, rather than reduce, informational value—contradicting the notion that high entropy (or disorder) is synonymous with rich information. Artistic expressions often simplify complexity, striving towards minimalism or facing disintegration. This dualistic nature of art reflects a reduction of tension, either through simplifying structures to their essence or by succumbing to disorder. The artistic theme, therefore, must balance simplicity with complexity to convey profound human experiences. Artistic language transcends mere sensory stimulation; it reflects internal or functional order, portraying significant societal or existential themes. Therefore, the value of an artistic theme is not solely in its complexity but in its capacity to reflect a meaningful perspective on life. While high structural order is necessary, it alone does not suffice unless it encapsulates a substantive, truthful insight into the human condition. In conclusion, while natural forces and philosophical doctrines may predict a state of final equilibrium—a sort of entropic endgame—art exists not to halt life's flux but to encapsulate and interpret its myriad forms and phases, ensuring that even within a constrained frame, it reflects a dynamic, progressing vista of human existence. Artistic or poetic language, while it may seem inherently connected with disorder and decadence, serves a far more complex role. It transcends mere sensory stimulation or chaotic expression by reflecting both internal and societal orders, portraying significant themes about existence, identity, and the human condition. Poetic language thrives on the balance between structure and meaning. High structural order can be important in creating a cohesive piece, but order alone is not enough—art must also encapsulate deeper truths about human experience. Through this lens, art is not merely an agent of chaos or decay, but a way to interpret and make sense of the constant flux of life, even when that flux involves moments of disorder or decadence. In this way, artistic language does not oppose the natural forces of entropy or societal decay; instead, it captures and interprets them, offering insight into the phases and transitions of human existence. Philosophical doctrines may predict a final equilibrium, a state of complete entropy or decay. Art exists to reflect the continuous unfolding of life, ensuring that even in a world moving toward disorder, there is always space for renewal, interpretation, and evolving understanding. Art stands as a reminder that the meaning of life lies in its transient nature, even as everything moves toward entropy and decay. Capturing the passing beauty of existence is its only goal.

3.2. Civilisation kill switch

Purposeless purpose

If the entropy of language is an inherent principle that restarts culture by manufacturing disorder, then art, myths, literature, and poetic language play a vital role in navigating and reshaping this process. These creative forms do not merely resist the chaos; they actively engage

with it, channelling disorder into meaningful expression and renewal. Art provides a medium to confront and reinterpret cultural entropy, transforming chaos into forms that resonate on emotional and intellectual levels. It allows society to process breakdowns and transitions, turning disruption into something comprehensible and even transformative. Myths serve as anchors, offering timeless narratives that transcend the shifts in language and societal structures. As civilisation evolves, myths maintain continuity and coherence, preserving collective wisdom and shared human experiences, even in times of upheaval. Literature acts as a bridge between the past and the present, capturing the nuances of a culture in flux. It preserves older forms of language and expression while simultaneously exploring new ones, providing a deeper engagement with the entropy that drives linguistic and cultural change. The poetic language embraces ambiguity, metaphor, and symbolism, resisting the functional simplicity of everyday speech. By doing so, it turns the entropy of language into a tool for exploring deeper truths, creating meaning out of disorder, and giving voice to the complexities of human experience. Together, these creative forms of language help manage and harness the entropy inherent in civilisation and language, guiding the transformation and renewal of culture. They turn disorder into an opportunity for reflection, growth, and the continual evolution of meaning within society. The 'purposeless purpose' of art and the planned obsolescence of language reflect a shared paradox where meaning and value arise from processes that lack a clear, functional goal. In both cases, the purpose may not be immediately practical, but they are essential forces that shape human experience and culture. In art, the 'purposeless purpose' emerges from its ability to transcend utility. Art does not exist to solve specific problems or serve a functional role in the way that technology or systems of governance do. Instead, its value lies in its capacity to evoke emotions, provoke thought, and offer new perspectives. Art thrives on its openness and ambiguity, offering a space where meaning is constantly created and reinterpreted. Its apparent lack of purpose is, in fact, its greatest strength—it gives humanity the freedom to explore ideas beyond the confines of the practical and the immediate. Similarly, the planned obsolescence of language introduces a cycle of change that, while it may lead to communication gaps and dysfunctions, also sparks renewal and adaptation. Language evolves and shifts, and this evolution is essential for cultural growth. As old words and forms become obsolete, new ones arise, allowing language to reflect the changing realities and complexities of society. The 'purposeless' aspect of this evolution lies in the fact that it is not always a conscious, directed process—yet it serves the deeper purpose of ensuring that language remains dynamic, relevant, and responsive to human needs. In this way, both art and the obsolescence of language share a 'purposeless purpose'. They do not adhere to a fixed, utilitarian function, but through their continuous cycles of creation, decay, and renewal, they sustain the fluidity and adaptability of human culture. These forces may appear directionless or chaotic, but they are essential for fostering the deeper evolution of meaning, identity, and connection within society.

Simple meaning

On the grand scale of civilisations, languages grow, expand, and lose their meaning as they become too large and complex. The semantic equilibrium—the balance between words and the concepts they represent—breaks down when a language scales beyond its capacity to hold meaning. This process mirrors what Geoffrey West describes[42] in the growth of cities and

[42] Longnow.org. (2024). Geoffrey B. West: Why Cities Keep on Growing, Corporations Always Die, and Life Gets Faster - The Long Now. [online] Available at: https://longnow.org/seminars/02011/jul/25/why-

companies, but with a significant difference: while languages decay, cities continue to survive and even thrive. The reason is that cities are built on people, and people can easily create new languages when the old ones lose their utility. Language cannot regenerate itself without human intervention. So, a community of people with close relations and shared memories and traditions over generations is the most valuable entity in any civilisation because it can create its own language. This is what must be protected at any cost, not cities, empires, or any abstract knowledge. Without this 'human language machine' the ability of language creation is lost and whole civilisations live relying on foreign official languages. The potentiality for language formation becomes the absolute goal of any sustainable community of homo sapiens. Many tribes or ethnic groups with common heredity, who have maintained their traditions and lived in stable environments for centuries, have successfully preserved their languages despite the rise and fall of empires around them. The Basque people are a prime example of this. Despite being surrounded by larger, dominant empires like the Romans, the Visigoths, and later the Spanish and French kingdoms, the Basque language (Euskara) has endured for millennia. The Basque people have long regarded Euskara as a crucial part of their cultural heritage. Throughout history, even when the Basque lands were controlled by foreign powers, the people maintained a keen sense of ethnic and linguistic identity, resisting attempts at forced assimilation. In stable environments with consistent traditions, language tends to be passed down through generations as part of daily life. The Basques, like other long-surviving ethnic groups, retained traditional social structures, customs, and practices that reinforced the use of their native language. Despite the dominance of external powers, many communities develop strategies to retain their linguistic identity. The Basque people navigated the pressure from the Roman, Visigothic, and later Spanish and French empires by keeping their language alive within their families and local communities, even if the dominant political and economic languages were imposed in certain contexts. While many groups like the Basques, the Welsh, or the Sami people have managed to preserve their languages for centuries in the face of external pressures, it is not a universal pattern. Other groups in similar situations have seen their languages gradually eroded due to assimilation, colonisation, or political domination. Nonetheless, the survival of languages like Euskara demonstrates the resilience of linguistic and cultural traditions when strong local identity, geographical protection, and community cohesion come together. The importance of Basque dialects lies in their role in preserving linguistic diversity, cultural identity, and adaptability. Unlike rigid official languages, which are often vulnerable to decay under empires due to their formalisation, Basque dialects have adapted to local contexts, maintaining flexibility and resilience. Each dialect reflects the unique traditions and geography of the Basque people, helping the language survive pressures from dominant powers like Spain and France. This adaptability contrasts with official languages, which can become rigid and detached from their speakers, leading to their eventual decline. The survival of Basque dialects shows that linguistic diversity and regional variation can offer more resilience against external forces, ensuring the language remains a living part of the culture. The example of 'Basque dialects' highlights that communities living closely together, protecting their traditions, and sharing common memories are more vital to cultural survival than official languages or knowledge production within

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cities-keep-growing-corporations-always-die-and-life-gets-faster/#:~:text=The%20bigger%20an%20organism%2C%20the [Accessed 12 Sep. 2024].

nations, states, and empires. It shows that people precede language—the social bonds, shared experiences, and local customs are the true foundation of a culture's endurance. While official languages often become rigid and detached, vulnerable to decline under the weight of imperial or state control, dialects like those in the Basque Country thrive because they remain rooted in the daily lives of the people. These dialects are flexible, evolving with the communities that speak them. The connection between people—through shared traditions and memories—ensures cultural and linguistic survival, not the imposition of a standardised or official language by external forces.

Complex languages

As dominant languages become more widespread, like in the rise of empires, they initially bring innovation and coherence. Less popular languages gradually eroded due to assimilation, colonisation, or political domination. Over time, as official languages grow in complexity, they lose their precision, much like a company that becomes too large to innovate effectively. The intricate systems of meaning within the language decay, leaving behind a structure that no longer serves its original purpose. This is the fate of many dominant languages throughout history, from Latin to Sanskrit, which once held immense power and meaning but eventually fragmented and faded as the civilisations they served collapsed. However, cities and human societies, unlike languages, persist. Even when a dominant language loses its meaning, the people within cities survive by choosing or creating new, simpler, and more meaningful languages. These new languages, often used in smaller, more cohesive communities, restore a kind of semantic clarity and purpose. They reflect the immediate needs and values of their speakers. In this cyclical pattern, in which an empire's grand language decays and is replaced by the simpler tongue of a new tribe or community, the true glue holding society together is not the language itself, but trust, social cohesion, and justice. In this view, language plays a role in maintaining societal trust and justice, but when it grows too large or too complex, it can no longer fulfil that role effectively. It becomes disconnected from the people it serves, and in doing so, it loses its power. At that point, society risks collapsing unless a new, simpler language—rooted in closer human connections—emerges. This is why human traditions, memories, and relationships kept in thousands of dialects are far more enduring than any single official language. Languages are ephemeral, but people and their cultures continue, reinventing communication in simpler, more meaningful ways, as necessary. As civilisations rise and fall, this cycle repeats: a grand language emerges with the expansion of an empire, loses its meaning as it grows, and is replaced by the language of a simpler, more cohesive group. The growth of cities ensures that people survive, adapt, and continue to communicate, but the languages they speak are constantly replaced, reflecting the underlying need for trust and justice rather than linguistic complexity. The complexity of social life, driven by the need to accommodate different regions, cultures, and purposes, leads to linguistic entropy—where the once-clear meaning of words becomes diluted, fragmented, and less precise. When linguistic entropy sets in and distorted communication threatens societal stability, it signals that the system has hit its limits. Yet, when that tool breaks, humans always find a way to build a new one, ensuring the continuation of their communities, their culture, and their collective memory—even when the empire's grand language has been lost to time. This entropy of language mirrors the overall disintegration of the empire itself. As the language evolves to accommodate more people and uses, its original structure weakens. Bureaucratic jargon, regional variations, and new terminologies proliferate, making the

language less efficient and less capable of maintaining the cohesion it once provided. The once-unifying language, now burdened by its own growth, loses its ability to clearly express the core values, laws, and ideologies of the empire. Historically, this process can be seen in languages like Latin, which, at the height of the Roman Empire, served as a unifying force across its vast territories. Over time, however, Latin became fragmented into various regional dialects, eventually giving rise to the Romance languages. The same process occurred with Sanskrit in ancient India, which, once a sacred and administrative language, gradually became inaccessible to the masses due to its increasing complexity and exclusivity. As the language decays, it no longer effectively binds the empire's diverse populations. Communication breaks down, and with it, the shared sense of purpose and identity that once held the empire together. This linguistic fragmentation mirrors the political and social fragmentation that often accompanies the decline of empires. The collapse of the language is both a symptom and a cause of the empire's downfall, as the entropy of language erodes the cultural and administrative coherence necessary for the empire to function. In this sense, the entropy of language serves as a kind of 'civilisational kill switch'. As the dominant language becomes too complex and loses its original meaning, the empire's capacity to govern, innovate, and sustain itself diminishes. Without a clear and effective means of communication, the empire falters, and the once-dominant language, like the empire itself, is reduced to a relic of the past.

3.3. Manufacturing disorder

Latent dysfunctions

It is indeed possible that language and communication systems are inherently prone to eventual breakdown. Language, like any evolving system, is subject to change, and as it becomes obsolete—whether through natural progression or intentional shifts—it contributes to social entropy, creating communication gaps. As outdated terms lose their relevance and new vocabulary emerges too slowly to keep pace, miscommunication grows, potentially disrupting social harmony and shared understanding. The increase in social entropy exacerbates these communication dysfunctions, making it harder to convey ideas clearly and leading to more frequent misunderstandings. This destabilisation of language, marked by inconsistencies and ambiguities, weakens the bonds that hold communities together, straining social relationships and complicating mutual comprehension. The complex interaction between the planned or natural obsolescence of language, rising social entropy, and communication dysfunctions suggests that linguistic changes can lead to broader social upheavals. As language evolves or deteriorates, communication breakdowns increase, further fuelling social entropy and intensifying latent dysfunctions. This highlights the urgent need for a proactive, adaptive approach to language management and communication strategies to maintain social coherence and functionality as society continues to change. Without such measures, the very structure of language and communication could unravel, contributing to a decline in societal cohesion over time. Could the 'Made to Break'[43] principle of obsolescence apply to language just as it does to technology? The obsolescence discussion can be extrapolated to language, particularly how planned obsolescence affects societal functions and communication. Planned obsolescence emerged as a key strategy for driving economic growth in the 20th century. Manufacturers, starting with lightbulbs and extending to automobiles, electronics, and household goods,

[43] Slade,G (2007). Made to Break : Technology and Obsolescence in America. Harvard University Press.

intentionally reduced the durability of their products to encourage repeated consumer purchases. This practice not only maximised corporate profits but also became a hallmark of consumer culture, leading to a cycle of continuous consumption and disposal. Just as products are designed to become obsolete, words, texts, and books can be seen as undergoing a similar process. Terms, phrases, and even entire languages may fall out of use as societal needs and norms change. In the digital age, where communication technologies rapidly evolve, language itself is subject to pressures that can render certain forms obsolete. For instance, the rise of digital communication has introduced new linguistic norms (e.g., emojis and abbreviations) that quickly replace older forms. This phenomenon can lead to a kind of linguistic obsolescence where traditional modes of expression are discarded, sometimes prematurely, before new forms are fully understood or universally accepted. This parallels the way consumer goods are discarded before they have outlived their usefulness. The relentless cycle of consumption and waste of information contributes to social entropy by fostering a throwaway culture, where not only goods but also ideas, values, and communication practices are quickly discarded. When applied to language, this throwaway mentality can lead to latent dysfunctions in communication. As language evolves rapidly—sometimes artificially or commercially driven by technological changes—society may struggle to maintain a common linguistic ground. This can result in miscommunication, misunderstandings, and a loss of shared meaning, all of which contribute to social entropy. For example, as newer generations adopt different communication styles, older generations may find it increasingly difficult to connect, leading to generational divides and a breakdown in social cohesion. This raises important questions about sustainability—not only in terms of physical products but also in terms of cultural and communicative practices. The relentless pursuit of the new, whether in technology or language, can have destabilising effects on society. Just as the environment suffers from the accumulation of waste products, society suffers from the accumulation of communication dysfunctions and the erosion of stable, shared language practices. The 'Made to Break' principle is an essential read for understanding the origins and consequences of planned obsolescence in modern consumer culture. The concept suggests that obsolescence is not just about generating endless consumption but could be seen as an inherent principle that introduces disruption and disorder, potentially resetting the culture from within. By deliberately manufacturing disorder, planned obsolescence forces constant innovation and adaptation, driving both cultural and technological evolution. This cycle of breakdown and renewal creates a system where, paradoxically, disorder becomes the catalyst for continual reinvention and progress.

The madding crowd

The phrase 'madding crowd's ignoble strife', borrowed from Thomas Gray's 'Elegy Written in a Country Churchyard', evokes the chaotic and unthinking nature of mass behaviour, where individual reasoning is lost to the frenzy of the crowd. Similarly, 'Extraordinary Popular Delusions and the Madness of Crowds'[44], in the original 19th-century text by Charles Mackay, delves into the dangers of mass hysteria, irrational trends, and groupthink. 'The Madness of Crowds' is an insightful exploration of human folly, collective delusion, and the often-irrational behaviour of groups. It emphasises how collective delusion can lead to widespread folly, whether in financial bubbles, political movements, or social trends. Large groups can often act

[44] Mackay, C. (2019). Extraordinary Popular Delusions And The Madness Of Crowds. S.L.: Digireads Com.

in ways that are disconnected from logic or reason, driven by emotion, fear, or social pressures. The exploration of collective stupidity reveals the fragile nature of human society, where individual reasoning can be overridden by the dangerous dynamics of crowd behaviour. Political language has led to a form of collective irrationality, where nuanced debate is often overshadowed by rigid ideological frameworks. What becomes clear is that language plays a significant role in shaping crowd behaviour. As public discourse becomes more ideologically charged, abstract, and ambiguous, it loses touch with reality. Words are inflated with moral or political significance, their meanings stretched and reshaped to serve ever-shifting agendas. This 'linguistic inflation' detaches words from their referents and transforms them into tools of manipulation. In such a state, communication no longer serves understanding—it becomes an instrument for control, conformity, and emotional escalation. This process is especially evident in modern identity-based discourses. Concepts such as gender, race, and justice, once tied to concrete social conditions, have become increasingly entangled in symbolic battles. Language is used not to clarify but to signal allegiance, shame dissent, and enforce ideological orthodoxy. Terms are redefined, reloaded with shifting meanings, and wielded to silence nuance. As complexity increases, clarity diminishes, and the crowd's ability to think critically erodes. The result is not debate but dogma, not discussion but hysteria. Such dynamics are not unique to the present. Historical episodes of mass delusion also emerged through the inflation of language—rhetoric masking fear, slogans concealing contradiction. What is new is the speed and scale of communication. Social networks magnify linguistic contagion, accelerating the spread of simplified narratives and emotional responses. The crowd is now global, instant, and perpetually online. Language, in this context, becomes both weapon and virus—distorting perception while claiming truth. The core danger lies in how abstract language enables detachment. As words become ideological tokens rather than tools of meaning, individuals are alienated from reality. The more abstract the terms, the more easily they conceal contradictions and suppress dissent. Language ceases to describe the world and begins to fabricate it. In this fog of terminology, people are no longer thinking but reacting. The crowd becomes susceptible to suggestion, its madness born not only from what it believes, but how it is made to speak. Thus, the madness of crowds is, at its core, a linguistic phenomenon. It is a collapse not only of reason but of meaningful speech. The ideological saturation of language fosters an environment where confusion masquerades as insight and where emotional allegiance replaces thoughtful engagement. The more language is used to obscure rather than to reveal, the more collective stupidity takes root. What emerges is a crowd united not by understanding, but by shared confusion—a society where meaning is manufactured, and disorder is the inevitable product of how we talk.

Honest thinkers

In every civilisation, the marginalisation and eventual exclusion of wise and intelligent individuals from the ruling elite is manifestation of decline. This is not about the exclusion of popular intellectuals or crowd-pleasing sophists, but rather the marginalisation of truly intelligent individuals who reject conforming to social norms or public expectations. These honest thinkers, uninterested in social acclaim, focus on deeper realities and long-term innovation. When society favours conformity and collective stupidity, sidelining these true intellectuals, it loses its capacity to progress, govern effectively, and adapt to challenges. Much like language entropy, which erodes the ability to communicate and sustain an empire, the

marginalisation of these socially indifferent geniuses leads to intellectual entropy. The culture becomes dominated by shallow ideas and short-term thinking, resulting in stagnation and eventual collapse. This process ensures the exclusion of true wisdom undermines the foundation of its long-term survival. This phenomenon, where the true intellectuals are pushed out of the spotlight and replaced by a preference for conformity, mediocrity, or even collective stupidity, serves as a self-destructive mechanism within the system. The individual thinkers are replaced with intellectual class. When those who are capable of critical thought, innovation, and deep insight are sidelined in favour of more immediate, superficial concerns, the empire undermines its own foundation, leading to a cultural decline that precedes its downfall. Following the entropy of language this marginalisation of intellectuals erodes a civilisation's ability to govern effectively, innovate, and sustain itself. Language entropy refers to how, as a dominant language grows more complex and abstract, it loses its original meaning and clarity. This communication breakdown weakens the ability of the empire to coordinate, maintain coherence, and convey its foundational values. Just as a language that has lost its purpose becomes a relic, so too does a civilisation that fails to foster its intellectual and creative core. Without the contributions of the wise and the intelligent, an empire loses its capacity for forward-thinking governance, scientific and cultural innovation, and ethical development. When a society collectively embraces conformity, rejecting the challenging ideas and critiques offered by intellectuals, it stagnates. The creative forces that once fuelled its rise—philosophical debate, artistic expression, and scientific discovery—are extinguished. By rejecting the intellectuals, the empire imposed an inevitable self-limitation. As intellectual rigour, artistic creativity, and philosophical reflection are cast aside, the empire’s capacity to adapt and evolve erodes. What remains is a civilisation unable to respond to new challenges, a shadow of its former self, and eventually a relic, just like the complex and meaningless language that once sustained it. In this way, both language entropy and the marginalisation of intellectuals serve as parallel forms of decline, acting as natural limits to the lifespan of any empire. Both reflect an internal decay that, left unchecked, leads to civilisational collapse. Therefore, the exclusion of the wise and the embrace of collective stupidity is not merely a cultural trend; it is the trigger of the empire’s inevitable downfall. This highlights Schopenhauer's core idea that intelligence is naturally antisocial, whereas stupidity or simplicity tends to align with societal expectations and norms. 'All society necessarily involves, as the first condition of its existence, mutual accommodation, and restraint upon the part of its members. This means that the larger it is, the more insipid will be its tone. A man can be himself only so long as he is alone; and if he does not love solitude, he will not love freedom; for it is only when he is alone that he is free. Constraint is always present in society, like a companion of whom there is no riddance; and in proportion to the greatness of a man's individuality, it will be hard for him to bear the sacrifices which all intercourse with others demands, Solitude will be welcomed or endured or avoided, according as a man's personal value is large or small, — the wretch feeling, when he is alone, the whole burden of his misery; the great intellect delighting in its greatness; and everyone, in short, being just what he is'.[45] Intelligent individuals, preoccupied with the broader, more abstract aspects of existence, are often alienated from everyday social interactions. This alienation stems from the gap between their intellectual depth and society’s preference for superficial concerns, making them appear acerbic, absent-minded, or uninterested in socialising. This is a recipe for disorder.

[45] Schopenhauer, A. (2021). The Essays of Arthur Schopenhauer. Blurb.

4. Miscommunication axiom

4.1. Utopia of communication

The stuff of dreams

The phrase 'We are such stuff as dreams are made on' from William Shakespeare's The Tempest can be interpreted through the lens of language, suggesting that human existence is fundamentally shaped by words, communication, and the narratives we create. In this view, the 'stuff' of dreams is language itself. Just as dreams are ephemeral, intangible creations of the mind, so too are we made of the words we speak, the thoughts we articulate, and the stories we tell. Language is not merely a tool for describing reality; it is the medium through which we experience and construct reality. Our identities, our histories, and our perceptions are all shaped by the linguistic frameworks we use. In this sense, we are 'made' of language, as it defines and shapes our consciousness, much like dreams do. The phrase underscores the idea that language, like dreams, is both transient and powerful. Just as dreams can dissolve upon waking, so can the realities we construct through language shift, fade, or change. It suggests that the very fabric of human existence — our sense of self, our understanding of the world — is woven from language, and thus, is as fluid and malleable as a dream. In The Tempest, Prospero's meditation on the fading spectacle of a masque becomes a reflection of the illusory nature of life. If we reinterpret the 'stuff' as language, Prospero's words point to how language constructs the 'great globe', the towers, temples, and all the structures of human experience. They exist not only in physical form but in the narratives and words we use to understand them. Human existence is inseparable from language. The words we choose shape our perceptions, our dreams, and even our identities. We are narrative beings, constantly engaged in internal and external dialogues that define our reality. Just as a dream is conjured from thoughts and symbols, so is our world conjured from language. Language plays a profound role in shaping not only our understanding of the world but also our vision of ideal societies. Our capacity for abstract thought, creativity, and collective imagination is intricately linked to our ability to use words to convey ideas, imagine possibilities, and construct virtual realities. Through language, we articulate desires, hopes, and visions of a better world—what could be seen as the creation of 'utopias'. The idea of utopia is inherently a product of language; it is born from our ability to envision alternate futures and express these visions through words. Philosophers, writers, and thinkers throughout history have used language to describe ideal worlds that challenge the imperfections of the present. The very act of imagining and describing utopias—be they political, social, or personal—is a testament to the power of language to shape collective dreams and ambitions. While language provides structure to our lives by giving form to thoughts and experiences, it also highlights the impermanence of those realities. Just as dreams are ephemeral, constantly shifting and dissolving, the realities we create through language are also transient. Societies, ideologies, and even personal identities can be redefined as language evolves, reflecting the fluid nature of human existence. Utopias, too, can shift from one form to another as novel words and ideas shape them. Language is thus both a tool for constructing lasting societal frameworks and a reminder of the temporary nature of those constructions. Just as a new language can build utopias, it can also dissolve them, altering perceptions of what is possible or desirable over time. In this sense, humans use language not only to navigate the world as it is but to envision and attempt to create worlds as they could be—utopias that are constantly shifting with the ebb and flow of the words and ideas that define

them. The utopian paradox is that utopia also serves entropy. An image of an ideal world of plenty that eventually brings dissipation of energy and collapse and simplification of certain parts of the system. Like the principle of fluid pressure, if you decrease suffering in one region of the world you increase it in another. This is the law of constant scarcity. The natural end of the realisation of any utopia as a land of plenty is Calhoun's Rat Utopia.

Utopian mentality

Karl Mannheim, a seminal Hungarian sociologist and a foundational thinker in the sociology of knowledge, introduced transformative concepts in his pivotal work, 'Ideology and Utopia'[46]. Distinguishing between 'partial' and 'total' ideologies, he explored how certain comprehensive worldviews are uniquely shaped by distinct social groups. Mannheim juxtaposed these ideologies—systems that justify existing social structures—with utopias, which envision transformative societal changes. Mannheim developed the concept of the 'utopian mentality', characterised by its incongruity with existing realities and its potential to radically alter them. The utopian mentality is a linguistic construction that expresses dissatisfaction with the present and projects hopeful visions of a radically different future. While ideologies reinforce the status quo, utopias challenge it by presenting alternative possibilities. Language is central to this process, as it communicates both the critique of existing realities and the blueprint for imagined transformative societies. This mentality manifests in diverse forms: Orgiastic Chiliasm is characterised by spontaneous, revolutionary zeal without temporal or strategic consideration, often seen in the lowest social strata. Liberal Humanism envisions gradual societal progress through reasoned reform, commonly upheld by middle social layers. Conservatism: looks to the past, idealising a return to or preservation of traditional values and structures, typically advocated by dominant social classes. Modern Communism predicts a structured, near-future societal overhaul, driven by organised political movements. Mannheim argued for a broadened interpretation of ideology, tracing its evolution from a tool for obscuring truth to a comprehensive framework influenced by a group's social position. He advocated for a 'general total conception' where all beliefs, including those of social scientists, are seen as products of their societal context. This perspective suggests that all knowledge is situational and influenced by factors such as class, location, and generational context. Today, Mannheim's theories continue to resonate, particularly his insights on how utopias shape historical movements and the dynamic interplay between ideology and societal change. His analysis remains a critical resource for understanding how societal knowledge and perceptions are intricately tied to underlying ideological structures. Karl Mannheim's 'Ideology and Utopia' offers an intricate exploration of the complex relationships between thought, society, and future aspirations. It stands as a profound commentary on how language and communication inherently foster utopian thinking. Through language, people can imagine idealised futures, critique current realities, and propose alternatives. It allows us to express desires for a better world, enabling collective vision and social coordination. As language evolves, so do utopian ideas, reflecting society's ongoing search for improvement and transformation. Yes, the pursuit of utopias often leads to revolutions, wars, and disasters. Idealised visions can become rigid and

[46] Mannheim, K. (1936). Ideology and utopia. London: Routledge.

dogmatic, causing conflict and violence when imposed on others, resulting in societal decay and unintended consequences.

'Dead Men's Propaganda'

In her analytical work, 'Dead Men's Propaganda: Ideology and Utopia in Comparative Communications Studies',[47] Terhi Rantanen revisits the seminal phases of comparative communications studies spanning the 1920s to the 1950s in the United States. Rantanen employs a lens crafted from the theories of Karl Mannheim and Robert Merton, unearthing the intricate dynamics of ideology and utopia that governed the early explorations into comparative communications. This exploration not only brings to the fore the pioneering efforts that have shaped modern understandings of media and propaganda but also underscores the ideological biases that influenced these foundational studies. Her research delves into the archival legacies and case studies that reveal how the academic and non-academic sectors contributed to the development of communications studies, influenced heavily by the ideological and utopian frameworks posited by Mannheim. Rantanen highlights how these frameworks created biases in knowledge production, shaping narratives around generational conflicts and the societal roles of insiders versus outsiders. By revisiting these early scholarly endeavours, Rantanen provides a critical retrospective view that connects past methodologies and ideological biases to current challenges in the field, particularly in understanding the mechanisms of war and propaganda in the 21st century. Mannheim's concept of a 'crisis in thought' speaks to the deepening ideological divides today, where opposing groups no longer share a common language or discourse. This communication breakdown is significant in the rise of populism, which undermines pluralist values and targets key democratic institutions, such as the media, intellectuals, and international organisations. Populism's attack on these communicative structures reflects a broader crisis in how truth and information are constructed and shared. The utopia of communication—that is, the idea of a shared, open, and truthful exchange of ideas—seems increasingly distant. Wars and conflicts underscore this, as the lines between news and propaganda blur, with each side viewing the other's communication as manipulative. In this context, Mannheim's call for 'Wissenssoziologie' (sociology of knowledge) becomes even more relevant, emphasising the need to critically assess how knowledge and truth are produced and communicated. Today, as academia faces external pressures such as reduced funding and political interference, the utopian vision of communication to foster understanding and societal progress is under threat. Comparative communications research is once again in demand, but the terms of debate are increasingly set by political forces, not by academics. In an age where communication is politicised, Mannheim's insights remind us that the pursuit of a utopia of communication—a space where truth and dialogue flourish—requires ongoing vigilance and critical reflection. The early comparative communication studies were driven by a utopian vision, centred on the belief that communication could catalyse global peace and mutual understanding. Initially, propaganda studies, especially during and after World War II, shaped the foundation of international communication research. Propaganda was often viewed as deceitful, foreign, and something to be studied in the context of national interests, reflecting an 'us vs. them' mentality. This distinction carried over into the development of comparative communication, which often relied on external, policy-driven funding, shaping its practical and political orientations. The

[47] Rantanen, T. (2024). Dead Men's Propaganda. LSE Press.

utopianism in international communication studies is most evident in its idealistic view of communication as a tool for promoting world peace and fostering understanding among nations. This belief was institutionalised in frameworks like the UN Charter and later initiatives like the New World Information and Communication Order (NWICO), which viewed global communication to resolve conflict. However, this utopian vision often clashed with the realities of political influence, funding pressures, and the need for pragmatic, problem-solving research. While communication was idealised as a path toward a harmonious global order, it remained a battleground of ideologies, with competing narratives and claims to truth. The legacy of this utopia persists, with scholars still divided on how best to use communication to achieve these lofty goals. International communication continues to struggle with the tension between utopian ideals and the practical, often politically driven realities of research, making it a field where ideologies and utopias remain deeply intertwined.

The myth of communication

Who created the myth of the 'positive value of communication'? The concept of 'myth' in a semiotic sense refers to an unspoken network of ideas that helps society understand certain topics. Roland Barthes' 'Mythologies'[48] (1973) is a collection of essays that examines how everyday cultural phenomena carry deeper ideological meanings. Barthes introduces the concept of 'myth' in a semiotic sense, where myths are not traditional stories but rather systems of communication that naturalise cultural and ideological messages. Myths, according to Barthes, serve to make socially and historically constructed meanings appear natural, timeless, and inevitable. This process of 'naturalisation' masks the fact that these meanings are products of signifying struggles—ideological battles over meaning within a society. Through his analysis of various cultural objects and practices, Barthes reveals how myths function to reinforce dominant ideologies by presenting them as common sense, thereby obscuring their constructed and contingent nature. The connection between nature and language is explored through the concept of discourse. A linguist’s definition of discourse as 'language in use' intersects with a social theorist's view of discourse as 'a social construction of reality' or a 'form of knowledge'. By analysing discourses, we can identify how certain representations of communication processes become 'naturalised', meaning they are accepted as natural or inevitable. This masks the fact that these representations often embody political or ideological positions, making them appear neutral and unquestioned. In his insightful analysis, 'The Myth of Communication as a Positive Value', Federico Boni delves into the idealised notion of communication as inherently beneficial. 'This is the ‘dark side’ of the paradoxical quality of all communication utopias, which began at least with the myth of the Tower of Babel, simultaneously the symbol of a utopia of communication and of the disastrous consequences that followed when attempting to build that very utopia'.[49] Boni interrogates the utopian framing of communication, pointing out that historical and contemporary discourse is saturated with both technological and social utopias. He challenges the dichotomies often found in communication theories—such as communication versus miscommunication and utopia versus dystopia—proposing a more nuanced understanding of how communication functions within societal constructs. Ideologies often

[48] Barthes, R. (1973). Mythologies. St. Albans: Paladin

[49] Boni, Federico. (2016) “The Utopia of Communication The Myth of Communication as a Positive Value.” Utopian Discourses Across Cultures: Scenarios in Effective Communication to Citizens and Corporations, edited by Miriam Bait et al., Peter Lang AG, 2016, pp. 27–42. JSTOR, http://www.jstor.org/stable/j.ctv2t4bv7.5. (Accessed 26 Aug. 2024.)

serve concrete political or social agendas, shaping public perception and stabilising existing power structures. The utopian visions are not just abstract aspirations but have real-world implications that can reinforce or challenge the status quo. The concept of 'myth' reveals how certain normalised views of communication obscure their underlying political and ideological biases. This naturalisation process renders complex social and historical forces as inevitable or timeless, masking their constructed and contingent nature. By dissecting the discourses surrounding communication, we can expose how certain representations become incorporated, turning complex social constructs into 'common sense'. This critique not only highlights the ideological underpinnings of supposed communication utopias but also underscores the role of scholars and practitioners in perpetuating or challenging these myths. A critical analysis of the mythologisation of communication as an inherently positive force calls for a revaluation of how communication theories and practices can, at times, obscure rather than illuminate the dynamics of power and social change. The dystopian view of communication reflects concerns and anxieties that have arisen from mass communication, symbolising the darker side of communication technology and its complex impact on society.

4.2. Dystopia of miscommunication

A new physics theory of life

Jeremy England[50] has proposed the provocative idea of 'dissipation-driven adaptation' that life exists because the law of increasing entropy drives matter to acquire lifelike physical properties. The theory suggests that life inherently arises as a function of the laws governing entropy, proposing that biological systems develop lifelike properties as a natural consequence of energy dispersion. Communication, like life, can be seen as a system optimised to capture and dissipate energy, but through the exchange of information. Traditional views attribute life's emergence to chance events within a primordial environment. In contrast, England's hypothesis posits that life's emergence is a predictable outcome of entropy's influence on matter, akin to rocks predictably rolling downhill due to gravity. Life distinguishes itself from non-living carbon compounds by its superior ability to capture and dissipate environmental energy. England's mathematical model, grounded in established physics, describes how atom groups, when driven by external energy sources like sunlight and surrounded by a heat bath such as an ocean, will reorganise to dissipate energy more efficiently over time, potentially leading to life-like attributes. England's hypothesis represents a pioneering intersection of thermodynamics and biology, suggesting that the characteristics of life are a predictable outcome of the laws of physics. This perspective offers a fresh lens through which to view biological emergence, challenging traditional notions of life's randomness and positioning it as an expected consequence of thermodynamic principles. As research progresses, these ideas either will find empirical support or prompt new theories, enriching our understanding of life's origins in the context of physical law. The theory that life arises from the law of increasing entropy can also be applied to human language, communication, and society, suggesting that all follow the same natural laws of entropy. Just as entropy drives physical systems toward disorder and energy

[50] *A new physics theory of life by Katherine Taylor*, *Quanta Magazine*. (2019) Available at: https://www.quantamagazine.org/a-new-thermodynamics-theory-of-the-origin-of-life-20140122/ (Accessed: 20 August 2024).

dissipation, it similarly impacts human cultural systems, leading to a gradual breakdown of structure, including the utopian ideal of communication. In this view, language and communication evolve not toward perfect clarity but toward disorder. Language, like any system governed by entropy, becomes less structured and more chaotic over time. As words lose meaning, linguistic structures simplify, and cultural shifts render certain expressions obsolete, the system generates disorder. This is comparable to the physical entropy that drives biological systems to reorganise, as described in England's theory, where matter evolves to dissipate energy more efficiently. Language, in turn, disperses information across social networks, but as this process continues, it introduces gaps, ambiguities, and eventual breakdowns. This leads to the dystopia of communication—language cannot perfectly convey meaning and unite people. The evolution of language means that miscommunication, ambiguity, and eventual fragmentation are inevitable. Just as the rise of entropy in isolated systems leads to a loss of order, the rise of linguistic entropy leads to the loss of precise, shared meanings. Art, myths, literature, and poetic language can be seen as human attempts to resist or channel this entropic force. They encapsulate meaning, stabilise communication, and create symbolic structures that push back against the natural drift toward disorder. However, they are not immune to entropy themselves. Over time, these cultural forms, too, evolve, adapt, and eventually decay, giving way to new forms that continue the cycle. In conclusion, both life and language are governed by the same entropic laws, making disorder and decay inherent in their progression. The quest for a perfect, utopian communication system is ultimately thwarted by the very forces that shape the evolution of life itself. Entropy ensures that both biological and cultural systems—including human language—are in constant flux, inevitably leading to disorder, chaos, and transformation. Just as England suggests that matter organises itself to dissipate energy effectively under the law of increasing entropy, one might argue that linguistic systems reorganise to dissipate information effectively across social networks. The 'energy' in this analogy is information, and like energy, information tends to spread out unless constrained by societal norms or linguistic rules. Entropy increase inevitably leads to the 'meaning death' or maximal entropy state in linguistic systems where the language becomes overly simplified or homogenised. The notion that both life and language are underpinned by similar thermodynamic principles highlights a fascinating universality in how complex systems, whether biological or cultural, behave and evolve over time.

Evolution and complexity

The Assembly Theory[51] (AT), is a novel framework that redefines how we understand the emergence and evolution of complex systems, including objects, biological entities, and even language. The theory posits that complexity can be quantified by the 'assembly index', which measures the minimum number of steps required to construct an object from its basic components. This concept extends beyond physical objects, applying to abstract constructs like language and mathematical theorems. The theory suggests that language, like any other complex system, evolves through a process of selection where simpler, more efficient forms are favoured. Over time, this could lead to the 'planned obsolescence' of certain linguistic structures or words

[51] Sharma, A., Czégel, D., Lachmann, M., Kempes, C.P., Walker, S.I. and Cronin, L. (2023). Assembly theory explains and quantifies selection and evolution. Nature, [online] pp.1–8. doi:https://doi.org/10.1038/s41586-023-06600-9.

as they are replaced by more streamlined alternatives that require fewer steps to convey the same meaning. As language evolves, older forms may become obsolete, like how outdated technologies are phased out. The application of Assembly Theory to language highlights how systemic miscommunication could arise from differences in the 'assembly index' of linguistic constructs. If two speakers use language with various levels of complexity or steps, this could lead to misunderstandings, as the listener may not accurately reconstruct the intended meaning. The theory implies that reducing the assembly index could minimise miscommunication, making language more universally accessible. AT also provides insights into the origin of language by framing it as a complex system that evolved through selection processes. Just as physical objects and biological systems are shaped by their assembly history, language is seen as an emergent property influenced by historical and causal factors. The evolution of language, therefore, can be understood as a series of selected steps that optimised communication, making it a product of both historical contingency and the need for efficient information transfer. Simpler forms of communication, requiring fewer steps to produce and understand, would have been favoured in early language development, with more complex structures emerging over time. Language, like biological systems, likely evolved through a form of selection, where efficient and easy-to-learn elements (those with lower assembly indexes) were more likely to survive and be passed down. Assembly Theory offers a unique perspective on the evolution and complexity of language, suggesting that it evolves through a process like natural selection, where simpler, more efficient forms gradually replace older, more complex ones. This evolution can lead to planned obsolescence and systemic miscommunication, with the origins of language rooted in the same principles that govern the formation of complex objects in nature. Assembly Theory and the Entropy of Language suggest that instead of a utopia of perfect communication, natural laws governing language and society lead us toward a dystopia of miscommunication. Both theories point to how systems—whether biological, social, or linguistic—evolve through processes that favour efficiency, yet these same processes introduce disorder over time. Assembly Theory posits that language evolves to minimise complexity, favouring simpler structures that require fewer steps to create and understand. However, as language adapts and simplifies to meet the demands of communication, it also loses nuance, precision, and clarity, contributing to greater entropy. Over time, this leads to a breakdown in shared meaning, where miscommunication and misunderstandings become more frequent. Similarly, the Entropy of Language, as explained through natural laws, implies that systems—such as life and language—move toward increasing disorder. In language, the drive to efficiently transmit information parallels the dissipation of energy in physical systems, but this very efficiency can lead to instability and fragmentation. Language, therefore, could be seen as a tool for organising social interaction and managing cognitive load, helping humans dissipate social and informational energy through communication. Historical contingencies and social factors further shape language’s evolution, making it more susceptible to breakdowns in communication. The dystopian outcome arises from this inevitable increase in entropy: language, once seen as a tool for cohesion and understanding, slowly deteriorates into miscommunication as it becomes more generalised and simplified. This disorder reflects a fundamental law of both nature and society, where complexity emerges and evolves but ultimately gives way to chaos and unpredictability. Thus, the natural trajectory of language and society leads us not toward a utopian ideal of perfect communication, but toward a dystopian reality where miscommunication is inevitable due to the entropic forces at play.

'Muqaddimah'

Why do cities keep growing, languages die, and life accelerates? What is the connection between the fragility of language and the enduring power of human communities? According to Geoffrey West[52], there are mechanisms behind the rise and fall of cities and corporations. But these cycles relate to the ephemeral nature of the languages that accompany them. Like biological systems, languages grow, expand, and eventually decay when their meaning becomes too diffuse. As languages get larger, their capacity to hold precise meaning diminishes, leading to a breakdown in what can be called 'semantic equilibrium'. Yet, just as cities persist through change, so do people. Even as languages die, human memory, culture, and the fundamental need for social trust remain, constantly giving birth to new, simpler, and more meaningful forms of communication. In this way, human beings adapt, reinvent language, and continue to thrive. West, a physicist and former president of the Santa Fe Institute, has long focused on the scalability of cities and the networks that allow them to grow. He draws parallels between biological systems, cities, and social organisations, all of which are complex adaptive systems. His research has revealed that cities follow certain universal scaling laws—laws that not only govern their growth but also their resilience. As cities grow larger, their 'dimensionality' increases, allowing for more opportunities, more jobs, and more innovation. This is much like how languages, as they grow, initially foster innovation and creativity. But over time, just as corporations buckle under the weight of bureaucratic inefficiencies, languages too begin to collapse under their complexity, losing their ability to convey meaning effectively. The remarkable thing about big cities, West notes, is that they can support a great deal of diversity—even what is considered not normal or even 'crazy' in small villages and tribes. This tolerance for difference is one of the reasons why cities survive and thrive. People bring innovation, fresh ideas, and adaptability. But the language used within a city, or an empire, does not enjoy the same robustness. As civilisations grow, the languages they use tend to become more complex, formal, and distanced from the lived experiences of ordinary people. They lose meaning, just as corporations lose their innovative edge as they scale and are consumed by bureaucracy. Languages, like corporations, become rigid, one-dimensional, and incapable of fostering creativity. This process of decay is inevitable in large, complex systems that cannot maintain their original flexibility. The innovation that once drove these languages or companies forward is replaced by administrative maintenance, and eventually, both lose the ability to serve their original purpose. They become relics of a prior time, unable to keep up with the faster pace of life that the West describes in cities. But why do cities persist? Because cities are people, and people are always creating new ways to communicate, new ways to understand each other, and new ways to build trust. Language, in this sense, is ephemeral, a tool that can be discarded when it no longer serves its purpose. What remains is the need for connection and the trust that holds society together. This echoes Ibn Khaldun’s insights in 'Muqaddimah', where he argues that the real glue of society is not language or knowledge, but trust in others and a sense of justice. Without trust, society collapses—whether that society is built around a decaying language or a dying corporation. The living cycle of a community is connected to the level of simplicity of its

[52] Edge.org. (2024). Why cities keep growing corporations and people always die, and life gets faster| Edge.org. [online] Available at: https://www.edge.org/conversation/geoffrey_west-why-cities-keep-growing-corporations-and-people-always-die-and-life-gets [Accessed 12 Sep. 2024].

language. As empires expand, their languages grow complex and abstract, losing emotional intimacy and clarity. Ambiguity and doublespeak erode trust, weakening the social fabric. When these languages collapse under their weight, simpler, more meaningful languages emerge from smaller groups, reviving direct human connection. Like Latin giving way to the Romance tongues, new languages carry cultural memory and rebuild broken communities. Cities endure not through language alone, but through the trust and cohesion of their people. As life accelerates, old systems break, but people adapt—creating new forms of speech, trust, and justice. Language may die, but human connection survives.

Miscommunication axioms

An axiom, postulate, or assumption represents a statement accepted as true without requiring proof, serving as a foundational premise for further reasoning and discussions. Originating from the Ancient Greek ἀξίωμα (axioma), the term signifies 'that which is deemed worthy or fit' or 'that which presents itself as self-evident'. A miscommunication axiom would serve as a foundational truth about how communication can inherently fail or lead to misunderstanding, much like Paul Watzlawick's axioms highlight the complexities of human interaction. Such an axiom would assert that miscommunication is inevitable due to the inherent complexity of language, context, and perception. Even the simplest exchanges can be interpreted in multiple ways, influenced by factors like individual experiences, emotional states, or cultural contexts. The dystopia of miscommunication has become an unavoidable reality of human life in civilisation, starkly contrasting with the long-held utopian belief that communication can bridge all gaps and foster perfect understanding. For years, researchers have envisioned communication as a powerful tool for connection, believing that with the right methods, human interaction could transcend misunderstandings and bring about unity and progress. This utopia of communication—where clear, seamless exchanges lead to social harmony—has been a guiding ideal in communication theory. However, life in sprawling urban environments and virtual realities exposes a different truth: Miscommunication is inevitable. In these vast, complex social networks, the sheer volume of interactions, coupled with diverse cultural, linguistic, and personal differences, makes perfect communication unattainable. The noise of city life, both literal and metaphorical, drowns out attempts at clarity. Messages are constantly distorted, misunderstood, or lost in translation as individuals interpret words, gestures, and silences through the lens of their own experiences and contexts. In this dystopia of miscommunication, even simple exchanges are fraught with the potential for misunderstanding. The foundational truth, or miscommunication axiom, is that human communication in large, fast-paced societies is naturally fragmented. Nonverbal cues often contradict spoken words, and the context that frames a message is rarely shared fully between individuals. The idea of shared understanding collapses under the weight of competing interpretations, emotional states, and cultural divides. This dystopian reality stands in sharp opposition to the utopia of communication imagined by scholars like Paul Watzlawick, where dialogue is seen as the path to resolving conflict and building trust. The dream of universal understanding falters when faced with the chaotic, ever-shifting nature of life in modern cities. In these environments, the complexity of human interaction leads to entropy in language—a breakdown of meaning where communication becomes less about clarity and more about survival during confusion. The dystopia of miscommunication teaches us that, rather than achieving perfect understanding, we must adapt to the chaos of urban communication. We must embrace the fact that miscommunication is part

of the human condition, especially in large social systems, and focus on finding ways to navigate and mitigate its effects. In doing so, we accept that the idealised utopia of communication may never fully materialise, and instead, we must learn to thrive within the disorder of the communities and cities we inhabit. The five miscommunication axioms influenced by Paul Watzlawick would represent foundational truths about how communication inherently leads to misunderstandings and conflicts. These axioms outline the key processes through which human interaction breaks down, providing insight into why miscommunication is inevitable and how it can be managed:

1. Inevitability of Miscommunication
Miscommunication is unavoidable because communication occurs continuously, even without intention. Any behaviour, inaction, or silence can convey unintended messages that are often misinterpreted.
2. Misalignment of Content and Context
Messages are always influenced by the context in which they are delivered. Miscommunication happens when the content of a message does not align with the relational or situational context, leading to misinterpretation.
3. Diverging Interpretations of Interaction Sequences
People often interpret the sequences of communication differently, punctuating interactions in ways that create a cyclical misunderstanding. What one person views as a cause, the other sees as an effect, leading to endless communication loops.
4. Conflict Between Verbal and Nonverbal Cues
Miscommunication arises when there is a mismatch between the digital (verbal) and analogic (nonverbal) components of communication. Discrepancies between what is said and how it is said cause confusion and conflict.
5. Imbalance of Power in Communication
Interactions can be either symmetrical (equal) or complementary (imbalanced). Miscommunication frequently occurs when power dynamics shift, either creating conflict in symmetrical relationships or exacerbating inequality in complementary ones.

4.3. Punk Rhetoric

'Communication Breakdown'

Punk is as much a cultural movement as it is a linguistic rebellion—one that embraces misunderstanding, miscommunication, and chaos. The rhetoric of punk is raw, stripped down, and unapologetically confrontational, reflecting its rejection of authority, nonconformity, and the polished promises of a bright future. Punk language does not seek clarity or resolution; instead, it thrives on disruption, disorder, and the breakdown of traditional communication norms. Its aim is not to build a utopia but to tell a dystopian, dark story of rebellion, alienation, and anger. Punk philosophy eschews the conventional drive for supremacy or superiority, embedding a deeper connection with the concept of planned obsolescence of language—deliberately designing products with a limited useful life. This ethos is mirrored in the punk movement’s embrace of raw, unpolished energy over technical proficiency, and its celebration of the ephemeral over the enduring. The iconic riff of Led Zeppelin's 'Communication Breakdown'—predating and influencing punk music—illustrates this transition. Jimmy Page,

the guitarist, acknowledged their pioneering exploration into new musical expressions, which later bands like the Ramones would evolve into a defining punk characteristic. Malcolm McLaren, a pivotal figure in the punk scene, managed bands like the Sex Pistols and the New York Dolls, effectively sculpting the commercial punk archetype. His epitaph, 'Better a spectacular failure, than a benign success', encapsulates punk's disdain for mediocrity and its embrace of bold, if not always successful, expressions. McLaren's influence was so profound that he has been likened to the Brian Epstein of punk, suggesting that without his flamboyant failures, punk might not have emerged as it did. Punk is not merely a form of protest but an act of sabotage against conventional success; it is made to break. Iggy Pop of the Stooges, often labelled the first 'punk', described[53] the term in an interview: 'They used that term for me to represent the idea of someone who wants to do something very strong and very uncompromising, that believes in or has a vision of very badly, but at the same time he's the kind of person who doesn't have the skills or ability to do it'. The planned obsolescence of punk slang is a deliberate simplification after reaching a peak in communication complexity of rock. Punk is both a musical genre and a philosophical critique of modern consumerist culture, emphasising decay over growth, and impermanence over permanence. The rhetoric of punk is abrasive, deliberately chaotic, and challenges traditional speech. Punk bands and individuals use lyrics and slogans that provoke and confuse, critiquing political power, corporate greed, and societal oppression without offering clear solutions. Words become weapons of disarray, with phrases like 'No Future', 'Anarchy', and 'Resist' encapsulating the punk spirit, painting a grim picture of society's collapse rather than a hopeful vision of what could come next. Punk's DIY approach extends to its very language, where disorder and imperfection are embraced. Punks create their zines, flyers, and slogans in ways that are intentionally chaotic—misspelled words, rough grammar, and fragmented phrases are part of the aesthetic. The goal is not clarity but a rejection of coherence. This broken-down rhetoric resists polished, commercialised language, celebrating the imperfection and chaos inherent in human expression. Punk's nonconformity does not just reject societal norms—it revels in linguistic disorder. The use of slang, blunt language, and shock value is not just a means of communication; it is a way of ensuring that the message may be misheard, misinterpreted, or rejected entirely. Words are used to defy and alienate, not to unify or conform. Punk rhetoric thrives in the cracks of language, where confusion reigns and conventional meaning falls apart. In this way, punk lyrics are not meant to provide guidance but to reflect the dystopian reality of societal breakdown, war, and inequality. The simplicity of the language often belies the complexity of the issues, leaving room for misinterpretation and pushing the listener to confront their discomfort. This aesthetic disorder is not a flaw but a feature—punk language is meant to destabilise, to disrupt any expectation of clarity or resolution. By rejecting polished rhetoric, punk emphasises the chaos of reality and mocks the notion of a meticulously organised world. Punk rhetoric fosters a community built on shared alienation and misunderstanding. The jargon, slang, and in-group language create a sense of solidarity among those who understand the codes, but it also excludes outsiders. This exclusion is part of the point—punk thrives on the tension between those who 'get it' and those who are left out, underscoring its chaotic and confrontational nature.

[53] Whatley, J. (2020). Iggy Pop reveals why he's considered the Godfather of Punk. [online] Far Out Magazine. Available at: https://faroutmagazine.co.uk/iggy-pop-why-godfather-of-punk-rare-interview-1977/#:~:text=%E2%80%9CAt%20the%20time%2C%20I%20was [Accessed 20 Sep. 2024].

Resistant meaning-making

Punk rhetoric is a form of 'resistant meaning-making'[54] and a radical critique of communication and cultural norms. Much like the Beat poets of the 1950s and the Hippie 'Flower Power' movement of the late 1960s, punk arose as a counter-cultural force, challenging the prevailing societal constructs. Originating in Britain during the late 1970s, amid the rise of Margaret Thatcher and the economic malaise following the OPEC oil crisis, punk became the voice of the disillusioned working class, expressing their disdain for the bleak economic conditions and the rigid conservatism of the 'Iron Lady'. Dick Hebdige's analysis of punk culture[55] begins with the symbolism of graffiti, which he describes as a way of asserting one's presence against the backdrop of the dominant culture—'Your presence on their Presence… hanging your alias on their scene'. This notion of graffiti as resistant meaning-making extends to the punk subculture's appropriation of streets as dystopian spaces of miscommunication. These graffiti, inscriptions, slogans, and poetry transform the public space into a living, breathing critique of the status quo. Punk's rhetoric, which deliberately sought to offend and disturb, was a confrontation with the banalities of mainstream language. As Hebdige notes, the obnoxious, perverse, and abnormal were not just tolerated but celebrated, revealing the inherent absurdity of countercultural ideals that paradoxically became mainstream over time. Punk, in this light, is more than just a music genre or fashion statement; it is a critique of communication itself, exposing the waste and obsolescence inherent in conventional modes of expression. By embracing the impermanent and the provocative, punk forces us to confront the planned obsolescence not just of products, but of language, meaning, and the very systems of communication that shape our understanding of the world. In punk rhetoric, there is no assumption of passive consumption. Audiences are expected to misinterpret, misunderstand, or even reject the message entirely. This interaction is central to punk's disruptive nature—rather than delivering a clear, cohesive statement, punk media invites active miscommunication. This is not seen as a failure but as a core component of punk's strategy. By breaking down the traditional communication model, punk rhetoric forces the audience to grapple with the noise, creating a space where meaning is contested and reshaped by those willing to engage with it. Much like the idea that meaning is derived through interaction, punk rhetoric sees the audience's role as central to the creation of meaning, but in a more confrontational sense. When punk messages are cast into mainstream culture, they are often fragmented, intentionally provocative, and open to misinterpretation. The audience becomes complicit in this chaos, decoding messages within their own cultural and emotional contexts, often deriving meaning that was not explicitly intended. This interaction turns punk messages into cultural artefacts that reflect not consensus, but the very fragmentation and disorder they embrace. In the world of punk rhetoric, consumption of media is not a passive experience but a disruptive act. Punk messages are not delivered with the expectation of clarity or coherence but as acts of rebellion, where meaning is fluid and often chaotic. The audience is not a passive receiver but an active participant in the process of miscommunication, where the very act of decoding the message becomes a reflection of punk's anarchic resistance to structure and authority. Ultimately, punk rhetoric rejects the idea

[54] Winnsox.com. (2019). Punk: A Form of Resistant Meaning-Making. [online] Available at: https://winnsox.com/blog/entry/punk-a-form-of-resistant-meaning-making [Accessed 20 Sep. 2024].
[55] Hebdige, D. (2012). Subculture: The Meaning of Style. Routledge.

of the media as a controlled tool of elites, instead embracing its potential as a space for disorder, chaos, and misunderstanding. Through this lens, punk communication is less about conveying a single, unified message and more about disrupting the process of meaning-making itself, allowing for a myriad of interpretations and misinterpretations that fuel its anti-establishment ethos.

Deconstruction and authenticity

The article 'Postmodernism and Punk Subculture'[56] explores punk rhetoric as the intersection of 'deconstruction and authenticity' within a postmodern framework. This countercultural movement, much like its predecessors, arose as a response to what is termed the 'condition of postmodernity'—a crisis of meaning precipitated by the commodification of everyday life. In this context, punk offers two distinct, yet interconnected, responses: deconstruction and authenticity. The deconstruction within punk is deeply rooted in the postmodern ethos of irony, nihilism, and the rejection of fixed meaning. This approach mirrors the broader postmodernist trend of dismantling grand narratives and embracing localised, self-reflexive interpretations. Punk artists and subcultures, through a process of cultural recycling and parody, disrupt the dominant symbols and narratives that saturate social spaces. By repurposing cultural detritus—whether through fashion, music, or performance—punk exposes the inherent absurdity and fleeting nature of mass-mediated consumer culture. This deconstructionist approach is a critique of communication itself, highlighting how messages are often reduced to mere simulacra in a hyper-commercialised society. Conversely, the authenticity in punk seeks to reclaim sincerity and independence from the pervasive influence of the culture industry. This facet of punk is a direct response to the planned obsolescence of meaning in a postmodern world, where symbols and messages are rapidly commodified and stripped of their original intent. Punk's DIY (do-it-yourself) ethic embodies this quest for authenticity, creating a network of underground media and independent cultural production that resists the superficiality of mainstream culture. Here, the focus shifts from style to substance, emphasising the creation of genuine artistic expression free from commercial exploitation. These two strands of punk—deconstruction and authenticity—may seem diametrically opposed, yet they are both reactions to the same socio-economic conditions. The deconstruction aligns with the transient, spectacle-driven nature of postmodern capitalism, where meaning is constantly destabilised and repackaged. Meanwhile, authenticity attempts to build resilient communities and sustainable modes of expression that stand in opposition to this cycle of obsolescence. Punk's engagement with these dual strategies reflects the broader challenges of postmodern society. On one hand, the deconstructionist impulse within punk offers a powerful critique of the commodification of culture, using irony and parody to expose the emptiness of consumerist narratives. However, this approach risks becoming as ephemeral as the culture it critiques, lacking a utopian vision to guide its rebellion. In 'Punk Philosophy as a Path to the Summits of Ethos',[57] Vuk Uskoković

[56] MOORE, R. (2004). Postmodernism and Punk Subculture: Cultures of Authenticity and Deconstruction. The Communication Review, [online] 7(3), pp.305–327. doi:https://doi.org/10.1080/10714420490492238.

[57] Vuk Uskoković (2016). Punk Philosophy as a Path to the Summits of Ethos. [online] Chapman University Digital Commons. Available at: https://digitalcommons.chapman.edu/pharmacy_articles/339/ [Accessed 20 Sep. 2024].

contends that adopting a punk persona is an essential stage in an individual's ethical evolution. Punk, as a philosophy, challenges the established norms and critiques communication itself by embracing a form of creative destruction that aligns with the concept of planned obsolescence in communication. The essence of punk lies in its rejection of blind adherence to authority and its celebration of creative aspirations over technical mastery. This stance is exemplified by the minimalist ethos of punk music, which dismantles the complex structures of progressive rock in favour of raw, straightforward expression. Uskoković argues that this simplicity, much like the elegant minimalism found in fundamental scientific equations, underscores the punk ideal: it is not what one does, but the aspirations behind those actions that matter. The fervour to challenge and change the world infuses punk art with a timeless vitality, making it resonate even when stripped of technical sophistication. Punk's relationship with language is particularly subversive. Uskoković suggests that punk philosophy demands the destruction of language as we know it, to break free from its limitations and allow for the emergence of new, more vibrant forms of expression. This linguistic annihilation serves as a metaphor for the broader punk ethos—destroying the old to make way for the new, an act of self-annihilation that mirrors the seed's necessary death to bring forth new life.

Destruction of language

The punk's destruction of language parallels the critique of communication. In a world where information is often commodified and reduced to waste, punk advocates for a radical departure from conventional discourse. By breaking the rules of clichéd communication, punk seeks to transcend language, using it as a tool for its deconstruction, thus paving the way for a more direct and profound engagement with reality. By walking the punk path, we are invited to ascend to the summits of ethos, where the interplay of freedom and constraint, creation and destruction, yields a richer, more vibrant understanding of our place in the world. Punk rhetoric serves as a way of revealing harsh truths about perversions of power and getting away with it. It can be compared to the role of the jester or satirist in the past. Historically, the court jester had a unique position: they were allowed, and often expected, to mock the powerful, speak uncomfortable truths, and expose the absurdities of the ruling class and society at large. Because they occupied the role of the 'fool', they could tell the truth in ways that others could not, often masking sharp critiques of power behind humour, absurdity, and seemingly nonsensical behaviour. This allowed the jester to 'get away with it' because their mockery was framed as entertainment rather than direct rebellion. Punk rhetoric operates in a similar fashion. It uses chaos, absurdity, and the rawness of expression to challenge authority and societal norms. Much like the jester, punk is disruptive—it rejects the polished, structured, and sanctioned modes of communication, instead embracing disorder, simplicity, and rebellion. This makes its critique of power subversive, as it often uses the language of the irrational or the extreme to expose the perversions of power. Both jester satire and punk poetics serve to peel back the facade of power by playing the role of the outsider, embracing a 'foolish' or chaotic perspective to speak truth without facing the same repercussions others might. They thrive on the tension between freedom and constraint, creation, and destruction, offering a critique that is both playful and deadly serious.

Just as Erasmus's 'Praise of Folly' uses satire to criticise societal and institutional madness, punk adopts a similarly irreverent stance to expose the absurdity and corruption in the world. Erasmus's work is about the celebration of human folly as a form of truth-telling—

foolishness, when examined closely, reveals the underlying madness of authority, religion, and politics. Punk does this too, but through chaos, simplicity, and subversion. Punk's destruction of language reflects a rejection of the systems that control how we communicate, think, and act. In a world of commodified communication and institutional madness, punk embraces the 'folly' of dismantling traditional forms, much like Erasmus's critique of intellectual and moral blindness. Punk's minimalism and rejection of technical sophistication symbolise a rejection of elitist hierarchies, much like 'Praise of Folly' mocks the learnt scholars and hypocritical priests of Erasmus's time. Thus, 'playing the fool' becomes a way of telling the 'awful truth' about the world's dysfunction, doing so through absurdity, aggression, and raw simplicity—challenging power while getting away with it by embracing its own brand of madness. In the words of Carl Jung, 'The soul demands your folly, not your wisdom'. By adapting to the 'stupidity and madness' of the world, 'The Fool' makes its critique more potent, as it speaks from within the chaos it critiques, much like Erasmus's use of folly to highlight deeper truths. The Miscommunication Axiom is—'An increase in population and linguistic complexity can lead to greater misunderstanding and semantic entropy, potentially amplifying confusion and reducing effective communication'.

5. Language of wisdom and folly

5.1. Erasmus's Wisdom

No man is wise at all times

In 'Praise of Folly', originally penned in Latin by Desiderius Erasmus in 1509, stands as a masterful satire that spirals through the folly inherent in all aspects of human life. Rooted in the intellectual traditions of the Renaissance, the work critiques the absurdity of human wisdom and the futility of communication, echoing the critique of language. The essay begins with Folly herself delivering a mock encomium, praising her virtues in a tone reminiscent of Lucian's satirical works. As the narrative unfolds, Folly extols self-deception and madness, turning her critique towards the superstitious abuses of Catholic doctrine and the corrupt practices within the Roman Catholic Church. Erasmus, ever the faithful critic, infuses Folly's voice with his disillusionment, especially after his disappointing experience in Rome. The work culminates in a stark declaration of the Christian ideal: 'No Man is wise at all Times, or is without his blind Side'. Erasmus employs classical allusions and a style typical of Renaissance humanists to elevate Folly to a metaphysical level, where she embodies the vitality and absurdity of life itself. She is depicted as a goddess, the progeny of Plutus (the god of wealth) and Youth, nurtured by the nymphs Inebriation and Ignorance. Her companions—self-love, flattery, forgetfulness, laziness, pleasure, dementia, wantonness, intemperance, and heavy sleep—represent the various facets of human folly that, according to Erasmus, make life bearable and even delightful. Folly asserts with pompous confidence that nothing fortunate or frolicsome in life exists without her influence. Erasmus's critique aligns with a broader philosophical commentary on the limitations of human wisdom and language. Erasmus elevates folly to a metaphysical realm, challenging the stoic wisdom of scholasticism, the humanist obsession with learning, and the pursuit of apatheia—a detachment from emotions. For Erasmus, folly is not merely a human weakness but the very essence of life's splendour, love, youth, and the playful, gratuitous aspects of existence. The thesis of Erasmus's satire suggests

that foolishness brings happiness and productivity, while excessive wisdom leads to pain, depression, and diminished creativity. In this light, Erasmus critiques the pursuit of knowledge as an exercise in futility, a waste of intellectual effort that only serves to complicate and obscure the simplicity of life. He argues that sciences and learning, which were initially intended to compensate for human deficiencies, have become tools of self-destruction, invented by the 'old devil Theuth' to mislead humanity away from true happiness. Erasmus's disdain for the overvaluation of knowledge and learning reflects a deeper critique of communication itself. He sees the rise of sciences and arts not as advancements but as the pests of mankind, born from the same source as all other evils. In a time when language was unified and communication was straightforward, there was no need for grammar, rhetoric, or laws—tools that have since become instruments of confusion and miscommunication. The golden age of simplicity and directness has been eroded by the complex, convoluted systems of knowledge that now dominate human thought. This critique resonates with the idea of planned obsolescence in language. Just as products are designed to become outdated, language and communication have been manipulated and complicated to the point where they no longer serve their original purpose of conveying truth and understanding. Erasmus's satire reveals how the pursuit of wisdom, far from enlightening humanity, has led to a proliferation of meaningless information—a waste of intellectual energy that only deepens the folly of human existence. 'In Praise of Folly' is not merely a satirical work but a profound commentary on the limitations of human wisdom, the futility of communication, and the planned obsolescence of language. Erasmus's irony reveals that true wisdom lies not in knowledge or prestige, but in recognising human folly and embracing life's humble joys. Echoing 1 Corinthians 3:18—'Let him become a fool, that he may be wise'—this paradox urges rejection of worldly wisdom to access deeper truths. Satire and absurdity have long exposed power's corruption by defying conventional language. When individuals abandon rationality as defined by authority, they disrupt systems that mask control as truth. By embracing the foolish, they access clarity beyond social norms. What seems irrational becomes the path to authentic understanding, spiritual insight, and freedom from superficial wisdom.

Playing stupid

In the Romantic era, thinkers like William Blake began to reframe stupidity as a potential source of wisdom. Blake's famous assertion that 'if the fool would persist in his folly, he would become wise' from 'The Marriage of Heaven and Hell' reflects a belief that persistence in seemingly foolish actions can eventually lead to deeper understanding. The idea is that through persistence in what seems like foolishness, one can uncover a deeper wisdom. Blake implies that by pushing boundaries, rejecting conventional thinking, and embracing what society might dismiss as folly, an individual can break through the superficial layers of understanding and reach a higher, more authentic truth. In this sense, the fool is not foolish at all but is instead engaged in a process of discovery. By defying norms and persisting in what others might see as irrational or nonsensical, the fool navigates the complexities of life in a way that the so-called wise often cannot. Wisdom, according to Blake, is not found by conforming to the standards of the world but by daring to challenge them. In the end, the fool's journey through folly is transformative, revealing the limitations of conventional wisdom and the richness of deeper insight. The value of stupidity is recognised as essential for reconnecting with aspects of reality that our structured categories often exclude. Embracing stupidity can help us recapture the

otherness of difference, breaking free from the confines of conventional thought. On the other hand, the societal impact of stupidity is profound and alarming. Walter B. Pitkin, in his book 'A Short Introduction to the History of Stupidity' (1932), warns of its pervasive and destructive influence. He argues that stupidity is the ultimate social evil, exacerbated by the sheer number of people affected, the concentration of power in the hands of the stupid, and the dangerous combination of high abilities with serious stupidity. In summary, stupidity is not merely a lack of intelligence or ignorance but a complex, multifaceted phenomenon that can manifest as a deliberate resistance to adaptation, a strategic social ploy, or an intellectual strategy. Its impact on society is both pervasive and insidious, challenging our ability to communicate effectively and adapt to new realities. In a world increasingly saturated with information and communication, the critique of stupidity—and the linguistic systems that perpetuate it—remains an urgent task. Stupidity can be a deliberate, informed mentality that is maladaptive action consciously taken against one's rationality. This definition distinguishes stupidity from mere ignorance by emphasising that stupidity involves a choice, not a forced or accidental act and that it actively resists adaptation to added information or circumstances. The phenomenon of 'playing stupid' is another intriguing aspect of this condition. Individuals can deliberately downplay their abilities, lowering others' expectations and evading responsibility. This tactic, while appearing foolish on the surface, can be a cunning strategy to avoid pressure and obligations, with the 'stupid' individual often performing admirably when truly assessed. The intellectual dimension of stupidity is equally significant. What is often labelled as feeble-mindedness can be a form of pseudo-stupidity, a mental block caused by emotional inhibitions? In this context, people may 'play stupid' in situations where understanding would provoke anxiety or guilt, thereby protecting a fragile psychological equilibrium. Conspicuous stupidity is a kind of shallow display of cleverness that, detached from real-world experience, leads to a superficial and ultimately foolish form of reasoning.

Le leggi della stupidità umana

In his provocative essay[58], 'The Basic Laws of Human Stupidity' ('Le leggi fondamentali della stupidità umana', 1976), Carlo M. Cipolla delves into the intricate and often overlooked domain of human stupidity, offering a stark critique of its pervasive influence. Cipolla articulates five foundational laws that encapsulate the essence of stupidity, underscoring its insidious and omnipresent nature: 1. 'The Inescapable Underestimation': It is a universal and unavoidable truth that individuals consistently underestimate the sheer number of stupid people that exist within any given population. 2. 'The Equality of Stupidity': The likelihood of any individual being stupid is entirely independent of any other characteristic or attribute they may possess, whether it be intelligence, education, or social status. 3. 'The Destructive Nature of Stupidity': A truly stupid person is one who causes harm or loss to another person or group while deriving no benefit themselves and possibly even suffering losses in the process. 4. 'The Peril of Underestimation': Those who are not stupid frequently fail to appreciate the destructive potential of stupid individuals. They forget, to their detriment, that engaging or associating with stupidity invariably results in significant costs, regardless of the context. 5. 'The Supreme Danger of Stupidity': The most dangerous person is, unequivocally, the stupid person, who

[58] Cipolla, C.M. (2011). The Basic Laws of Human Stupidity.

poses a greater threat than even the most malicious pillager. These laws, particularly the third, illustrate Cipolla's conceptual framework for understanding human behaviour through the lens of benefits and losses. He categorises individuals into four distinct groups based on their impact on themselves and society: - 'Helpless Individuals': These people contribute positively to society but are exploited, often resulting in a net loss for themselves. - 'Intelligent Individuals': They manage to benefit both society and themselves, achieving a balance that leverages their contributions for personal and communal gain. - 'Stupid Individuals': Their actions are counterproductive, harming both themselves and others, leading to a net detriment to society. - 'Bandits': These individuals pursue their self-interest, often at the expense of societal welfare, although the extent of the damage they cause can vary. Cipolla further refines the categories of 'bandits' and 'naive individuals' by considering the net effect of their actions on societal welfare. For example, a bandit may enrich himself to varying degrees while impoverishing society and a naive individual may either contribute positively to society at their own expense or allow themselves to be exploited. Those who are naïve, or 'semi-stupid', engage in behaviours that ultimately result in a net drain on societal welfare. In contrast, some bandits, particularly sociopaths, psychopaths, and those driven by amoral self-interest, act with full awareness of the negative consequences their actions impose on society yet remain indifferent to these outcomes. Cipolla's exploration reveals a grim reality: stupidity, as a force within human affairs, is not just a benign flaw but a potent and pervasive danger. It transcends mere ignorance, manifesting as a wilful and often unconscious resistance to adaptation and progress. Through this lens, stupidity becomes not merely a personal failing but a systemic issue, exacerbated by the structures of communication and societal organisation that allow it to proliferate unchecked. Cipolla's analysis of human stupidity suggests that both intelligent individuals and bandits face a unique paradox: the best strategy for survival and success may be to 'play stupid'. For the intelligent, playing stupid can serve as a defence mechanism, allowing them to navigate a world rife with irrationality without drawing attention or provoking conflict. By blending in with the status quo, they avoid the dangers posed by truly stupid individuals, whose destructive potential Cipolla warns against. Similarly, for bandits—those who seek to exploit others for personal gain—pretending to be less aware or capable can serve as a cunning strategy. It allows them to act without arousing suspicion, making it easier to manipulate situations to their advantage while minimising the risk of backlash. Ultimately, in a world where stupidity is both omnipresent and dangerous, blending in with collective miscommunication and confusion may offer a form of protection. In a society where stupidity often holds sway, those who can tactically 'play dumb' can navigate the chaos more effectively, avoiding the direct costs of confronting stupidity head-on. This paradox reinforces Cipolla's central thesis: that stupidity is not merely an individual trait but a pervasive force that shapes human interaction in subtle, often destructive ways. For those aware of its power, playing along may be the wisest, and perhaps the safest, course of action. In the end, it looks like 'if the fool would persist in his folly, he would win any argument'.

Wilful rejection of wisdom

The destiny of those who oppose the power of collective stupidity is often fraught with frustration, isolation, and, in many cases, resistance from the very groups they seek to enlighten. Collective stupidity, as a powerful social force, thrives on conformity, miscommunication, and the suppression of critical thought. Dietrich Bonhoeffer's 'Letters and Papers from Prison' reveal

the nature of stupidity as a far more insidious threat to society than malice. While evil can be confronted, exposed, and resisted, stupidity presents a unique challenge: it is impervious to reason and immune to argument. This concept, rooted in Bonhoeffer's letters from prison[59], serves as a stark warning to any society where certain individuals or groups accumulate excessive power. During the darkest period of German history, when innocent lives were destroyed by incited mobs, Bonhoeffer—a young pastor who boldly spoke out against these atrocities—was ultimately imprisoned. It was there, in the confines of his cell, that he pondered how his once-enlightened nation had descended into a collective of cowards, criminals, and opportunists. His conclusion was unsettling: the root of this transformation was not mere malice, but a pervasive and dangerous stupidity. Bonhoeffer argued that stupidity is not merely an intellectual deficiency but a moral one. It is a condition that infects individuals, not because they lack intelligence, but because they surrender their autonomy and critical thinking in the face of overwhelming power. This surrender creates a society where individuals become conduits for empty slogans and mindless catchphrases, losing their independence and becoming instruments of evil without even recognising it. In essence, stupidity is not an inherent trait but a condition that people allow themselves to be subjected to, particularly in the context of social groups or under the influence of political or religious power. Stupidity is a choice, a linguistic affectation. This is not a failure of intellect per se but a failure of will and autonomy, where individuals relinquish their capacity for independent thought in exchange for the comfort of conformity and the illusion of belonging. This condition is exacerbated in large groups, where the complexity of language and the scale of the environment contribute to a collective dumbing down. In such settings, individuals are expected to shed their identities and embrace freedom from responsibility that descends into madness. The crowd, as Bonhoeffer observed, tends to level itself to the lowest common denominator, creating a symphony of folly where stupidity reigns supreme. The creation of a mass society, Bonhoeffer implies, is inherently tied to the propagation of stupidity. In such a society, language becomes a tool not for enlightenment but for maintaining the status quo—an equilibrium of semantic emptiness. Stupidity, in this context, is not a lack of knowledge but a wilful rejection of wisdom, a deliberate choice to remain ignorant. It is a complex, self-perpetuating cycle where education and communication become vehicles for sustaining mediocrity rather than fostering true understanding. Bonhoeffer’s insight into the nature of stupidity is a critique of how communication can be weaponised to create and maintain power structures that thrive on the suppression of individual thought. It highlights the planned obsolescence of language, where words are stripped of meaning and used to manipulate rather than to enlighten. In such a world, playing stupid becomes a principle of power, a means to control and manipulate the masses. The tragic irony of Bonhoeffer’s life—executed for his involvement in a plot against Hitler—underscores his warning: a society that fails to recognise and resist the dangers of collective stupidity is doomed to repeat the mistakes of the past. His words serve as a reminder that true freedom and responsibility lie not in the abandonment of thought, but in the relentless pursuit of wisdom, even in the face of overwhelming stupidity.

[59] Dietrich Bonhoeffer (2010). Letters and Papers from Prison. Fortress Press.

Predictably irrational

The phenomenon of mass psychosis[60], where entire populations can become delusional and detached from reality, can be described as a form of collective stupidity. This type of collective madness often stems from extreme fear, manipulation, or propaganda. Mass psychosis can be triggered by a combination of social, political, and psychological factors, often amplified by propaganda and monopoly of media and knowledge production. It emphasises that delusional thinking becomes normalised as the population collectively adopts irrational beliefs, creating a distorted perception of reality. Escaping from this cycle requires a return to reason and critical thinking, as well as the courage to stand against the delusional mainstream narrative. This concept connects to the idea that individuals, when caught in such a psychosis, are not simply ignorant but may consciously choose to embrace falsehoods because it benefits them—whether socially, politically, or economically. In this way, mass psychosis acts like 'societal stupidity' where individuals perform roles and adopt beliefs that serve their interests, even if they are irrational or destructive. When mass communication channels like the corporate media or government-controlled outlets disseminate fear, propaganda, or misleading information, they shape a distorted narrative that people begin to accept as reality. This form of miscommunication is not just the spread of ideas; it is a method of conditioning. Repetition of key phrases, slogans, or ideologies through speeches, advertisements, and broadcasts normalises irrational beliefs. Over time, this language creates an echo chamber where alternative views are suppressed, and those who question the dominant narrative are marginalised. In such environments, individuals start to conform not out of belief, but out of fear or the desire to belong. Language, in this context, becomes a tool not for conveying truth, but for reinforcing collective delusion. Much like George Orwell's concept of 'Newspeak' in '1984', the simplification and manipulation of language limits the ability of individuals to think critically or dissent. As a result, a population under mass psychosis speaks and thinks in predetermined, narrow patterns, often detached from reality. In 'Predictably Irrational: The Hidden Forces That Shape Our Decisions', Dan Ariely[61] explores how the irrationality of human decision-making often stems from psychological and social influences, which can be seen as part of a broader 'language of stupidity'. Much like the miscommunications, misunderstandings, and absurdities we experience in everyday language, the decisions people make are often driven by forces that lead to irrational and seemingly 'stupid' outcomes. Ariely's work challenges the classical notion of rational economic behaviour, instead showing that people frequently make irrational decisions based on cognitive biases, emotional reactions, and flawed reasoning. This irrationality is not random but 'predictable'—people tend to make the same errors repeatedly, which speaks to the structured nature of our irrational behaviours. For instance, people behave irrationally when something is offered for free. This mirrors the linguistic absurdity of how people often gravitate toward 'empty' words, or meaningless jargon, just because they seem appealing. Similarly, 'anchoring'—the way people fixate on an initial piece of information, like a price point or a suggested value—can be compared to how individuals latch onto particular words or ideas without critical analysis, leading to

[60] www.youtube.com. (n.d.). MASS PSYCHOSIS - How an Entire Population Becomes MENTALLY ILL. [online] Available at: https://www.youtube.com/watch?v=09maaUaRT4M./[Accessed 24 Sep. 2024].

[61] Ariely, D. (2008). Predictably irrational : the hidden forces that shape our decisions. New York: Harper.

misunderstandings or poor decision-making. Ariely also delves into 'social norms' and how they shape irrational behaviours, which can be linked to how language and societal expectations often trap people into patterns of communication that perpetuate confusion or false beliefs. This is akin to the 'stupidity' that arises when people act irrationally simply to conform to group behaviour, much like how language can become nonsensical when driven by social pressures rather than clarity or logic. In short, Ariely's exploration of human decision-making reflects the broader 'language of stupidity' in which irrationality is not just an occasional error, but a predictable and structured part of how humans think and behave. Understanding these forces can help us navigate both our decisions and the ways we communicate, highlighting the intricate connections between irrationality and the complexities of language.

5.2. Power of stupidity

Collective stupidity

Does collective behaviour lead to collective intelligence or stupidity?[62] Are we, as a collective, ensnared in a cycle of stupidity, or is there a path to collective intelligence? This question lies at the heart of understanding how group behaviour influences our decisions, for better or worse. Jens Krause, a leading researcher from Humboldt University, Berlin, delves into this paradox in his study of collective behaviour. His insights reveal the dual potential of group dynamics to either elevate or diminish our collective decision-making. Drawing parallels between the synchronised movements of birds in flight or fish in a school, Krause emphasises how our behaviour is often unconsciously swayed by those around us. However, unlike these animals, human collective behaviour does not always lead to intelligence. It can just as easily descend into collective stupidity. When waiting at a crosswalk, we are twice as likely to cross against a red light if someone next to us begins to cross first. This behaviour illustrates how easily collective actions can lead us astray. In this case, the influence of another's poor decision can override our judgment, leading to dangerous and irrational behaviour. Krause's research underscores that collective behaviour has the potential to foster both intelligence and stupidity. In some scenarios, groups can indeed make better decisions than any individual could alone. However, this only holds true under specific conditions: when individuals possess a basic level of understanding, when they are honest in their decision-making, and when there is sufficient diversity in thought to avoid correlated errors. Without these conditions, collective behaviour can amplify errors and lead to disastrous outcomes. In sum, the study of collective behaviour reveals a delicate balance between intelligence and stupidity. While groups have the potential to make smarter decisions than individuals, this potential is contingent upon numerous factors that, if misaligned, can lead to collective folly. Understanding these dynamics is crucial for harnessing the power of collective intelligence while mitigating the risks of collective stupidity. In his essay[63] 'Collective Stupidity', Denny Gioia tackles the paradox of human intelligence—how we, as individuals, are capable of remarkable intellect, yet as a collective, often exhibit staggering folly. This discrepancy is especially glaring when considering our response to

[62] Sainsburywellcome.org. (2021). Understanding how collective behaviour leads to collective intelligence or stupidity | Sainsbury Wellcome Centre. [online] Available at: https://www.sainsburywellcome.org/web/qa/understanding-how-collective-behaviour-leads-collective-intelligence-or-stupidity [Accessed 25 Aug. 2024].

[63] Gioia, D. (2023). Collective Stupidity. Journal of Management Inquiry, 33(1), pp.92–93. doi:https://doi.org/10.1177/10564926231203846.

climate change, an existential threat that demands urgent and decisive action. Gioia's critique is a sobering reflection on how our collective behaviour has been marked by a profound failure to act, despite overwhelming evidence of the impending crisis. Gioia begins by acknowledging that most rational individuals accept the reality and dangers of climate change. However, he notes a troubling disconnect: while individuals may understand the gravity of the situation, collective action has been woefully inadequate. This gap between individual awareness and collective inaction raises critical questions about why humanity, in the face of such an existential threat, continues to behave so foolishly. One explanation is the persistence of outdated priorities, particularly within the business world. For too long, profit has been the primary concern, often at the expense of the planet's well-being. Even as environmental issues have gained prominence, many firms continue to prioritise short-term gains over long-term sustainability. This narrow focus on profit is a form of collective stupidity that blinds us to the urgent need for action. Another factor contributing to this collective stupidity is the deliberate dissemination of misinformation by powerful industries. All industries have adopted similar tactics, sowing doubt, and confusion about the reality to protect their interests. This calculated obfuscation undermines public understanding and delays necessary action, further entrenching collective inaction. It looks like there is a human tendency to avoid difficult truths and resist change. People are more inclined to dismiss slow-moving threats, like climate change, because they do not trigger immediate responses. This psychological inertia, coupled with corporate distractions and 'whataboutism', leads to a dangerous complacency that perpetuates the status quo. The irony of human intelligence is that the most advanced species on Earth individually, are capable of repeatedly committing catastrophic errors collectively. Eventually people face the consequences of their failure to act wisely collectively, paying a steep price individually.

Why do smart people do stupid things in big groups?

How does collective stupidity work? Why do smart people do stupid things in groups? Why functional stupidity can cause organisational collapse, financial meltdown, and technical disaster? 'The Stupidity Paradox: The Power and Pitfalls of Functional Stupidity at Work'[64] by Mats Alvesson and André Spicer delves into a profound and often overlooked phenomenon within organisational life—functional stupidity. This concept explores how, within the intricate dance of corporate operations, seemingly intelligent individuals and organisations can engage in irrational and nonsensical behaviours that, while potentially beneficial in the short term, often lead to disastrous long-term consequences. The paradox of stupidity in the workplace lies in its dual nature. On one hand, a certain degree of functional stupidity can foster workplace harmony, streamline processes, and drive short-term success. It allows individuals to focus on their tasks without questioning the purpose or potential consequences, thus avoiding conflict, and promoting a smooth operational flow. However, this same ignorance, when left unchecked, can result in organisational collapse, financial ruin, and technological failures. This paradox is pervasive, influencing everything from the blind adoption of management fads to an overemphasis on superficial aspects like brand image. The book challenges the reader to question the 'knowledge economy' myth—an idea that many organisations claim to be

[64] Mats Alvesson (2016). The Stupidity Paradox : Why Smart People Don’t Think at Work. London: Profile Books.

knowledge-intensive, yet their employees are often relegated to mundane, repetitive tasks. This disconnection between perception and reality highlights the superficiality that often underpins corporate practices. The dangers of mindless expertise arise when highly skilled professionals carry out their tasks on autopilot, lacking any engagement in critical thinking. This 'skilled incompetence' can lead to stagnation, as individuals become resistant to change and latest ideas, preferring the comfort of routine over the challenge of innovation. In his essay[65] on stupidity, Robert Musil argues that in order to comment on stupidity, one must not be stupid: '...the best place might be with the initial difficulty, which is that anyone who wants to talk about stupidity, or profitably participate in a conversation about it, must assume about himself that he is not stupid; and he also makes a show of considering himself clever, although doing so is generally considered a sign of stupidity!' To comment on stupidity without embodying it is a paradoxical endeavour. To discuss stupidity presupposes intelligence, yet claiming intelligence risks lapsing into the very stupidity one critiques. This paradox suggests that stupidity is not merely an intellectual deficit but a complex social phenomenon that defies straightforward analysis. Stupidity, as Musil implies, often exists as the Other—a perceived threat to the intelligent, yet one that remains inscrutable and untouchable due to its inherent contradiction. Intelligence, in its quest to outmanoeuvre stupidity, may find itself ensnared by it, revealing that the true nature of stupidity is elusive and perhaps more powerful than we care to admit. In his exploration of stupidity, Musil candidly admits to a lack of a definitive theory that could potentially offer salvation to the world. Unlike goodness, beauty, or electricity—concepts that have long captured the intellectual pursuit—stupidity remains curiously neglected within the annals of scientific inquiry. Musil's approach to stupidity is not scientific but observational, grounded in everyday language and its unpredictable usage. He compares the task to a lepidopterist's nightmare—just as one identifies a specimen, another confusingly similar one appears. Words related to stupidity resist clear classification, suggesting that their links may be more illusion than essence. Musil highlights the paradox of discussing stupidity: assuming one is not stupid is itself suspect. Often, pretending to be foolish becomes a survival tactic, especially in power imbalances. Feigned stupidity can disarm the powerful, making it a subtle tool of resistance, manipulation, and social navigation.

Language consists of flawed concepts

Is it possible that the myth of intelligence is damaging, asks[66] Jordan De Silva in 'Why 'intelligence' is a stupid concept' (2017). Have you ever doubted your intelligence, thinking it might be the reason you cannot achieve what others have? Research increasingly shows that our attitudes toward intelligence play a crucial role in our ability to reach our goals. One of the most pervasive myths is that the most successful individuals are inherently the most intelligent. This belief is not only misleading but also detrimental to personal growth. Many people fall back on the idea that failure is proof of a lack of intelligence, reinforcing the notion that they

[65] Robert Musil (2019). On Stupidity (translated from the German). [online] PN Review Blog. Available at: https://pnreviewblog.wordpress.com/2019/10/21/on-stupidity-by-robert-musil-translated-from-the-german/ [Accessed 24 Sep. 2024].

[66] Jordan De Silva (2017). Why 'intelligence' is a stupid concept - Mission.org - Medium. [online] Medium. Available at: https://medium.com/the-mission/why-intelligence-is-a-stupid-concept-ed54d22d9084 [Accessed 24 Aug. 2024].

are not the smartest in the room. This perspective overlooks the reality that the stereotypical 'intelligent person' often succeeds by persistently pushing through repeated failures. These individuals learn from their mistakes, adjusting their strategies until they achieve their desired outcomes. True intelligence, if it exists in any meaningful way, might be better understood as a particular attitude towards failure—seeing it as a valuable opportunity for reflection, learning, and renewed effort rather than a definitive endpoint. One of the most problematic aspects of modern education is its arbitrary division between 'intelligent' and 'non-intelligent' students. From an early age, we are led to believe that top performers are naturally gifted, and born with superior intelligence. However, this belief is a fallacy. High achievers often put in more effort or have developed more effective study habits. Some of the significant predictors of long-term academic success are motivation and study strategies, not inherent intelligence. This highlights the importance of recognising the limitations of the traditional concept of intelligence. The notion of intelligence is fundamentally arbitrary. What does it truly mean to be intelligent? Intelligence can encompass a variety of traits, such as quick learning, critical thinking, creativity, wit, academic performance, and articulation. Interestingly, most people considered 'intelligent' likely possess only one or two of these qualities, not all. This suggests that intelligence is not a monolithic trait but rather a collection of various abilities, each of which can be developed to some extent in everyone. Having deconstructed the idea of intelligence into specific characteristics, it becomes clear that no single, overarching concept of intelligence is responsible for success in studies or work. Environmental factors such as culture and upbringing influence IQ scores, making traditional measures of intelligence a poor reflection of innate intellectual abilities. Academic success, therefore, may stem more from learnt behaviours and strategies than from inherent gifts. People who see intelligence as a fixed trait are less likely to challenge themselves and take on difficult tasks, fearing failure. However, studies show that those who believe intelligence is malleable are more likely to improve over time. Interestingly, individuals who are labelled as 'gifted' or 'smart' from a youthful age often avoid challenging situations to protect their reputation, a phenomenon known as the 'big fish, small pond' effect. They fear public failure, which they equate with a public questioning of their intelligence. As a result, they limit themselves to less challenging environments where their intelligence goes untested. Modern measures of intelligence struggle to differentiate between inherent and acquired traits, leading to a flawed understanding of what it means to be smart. The most important lesson is to view intelligence as something malleable and capable of growth. By adopting this mindset, you are more likely to embrace challenges, step outside your comfort zone, and see failure not as a setback but as a necessary part of the learning journey. The exploration of stupidity across various contexts—from functional stupidity in organisations to the philosophical critiques of intelligence—reveals a common thread: stupidity is not merely an individual failing but a collective phenomenon that emerges and amplifies within large, complex linguistic groups. As these groups grow and their communication becomes more intricate, the potential for miscommunication, semantic entropy, and collective stupidity increases. Stupidity, as analysed, often arises from the disconnect between individual cognitive capacities and the pressures of collective behaviour. In large groups, the complexity of language and the proliferation of communication channels lead to a degradation of meaning, where the clarity and precision of ideas become diluted. This semantic entropy fosters environments where thoughtless conformity, misinterpretation, and the failure to critically engage with information thrive. The Miscommunication Axiom -'As populations grow and linguistic

systems become more complex, misunderstanding and semantic entropy tend to rise, amplifying confusion and weakening effective communication'.—captures this dynamic.

Theory of stupidity

What would a theory of collective stupidity look like? In 2004 Geoff Mulgan answered in his 'Lemmings, Laziness, and Likes: A Theory of Collective Stupidity[67]'. Collective intelligence is the amplified capability arising from the constructive collaboration of individual minds, shaping the entirety of human civilisation. Left to our own devices, our lives would likely be solitary and brief. However, this collective intelligence can also manifest in smaller contexts and can be quantified when groups solve problems more effectively than isolated individuals. Conversely, collective stupidity occurs when the aggregation of individual bits of intelligence results in poorer outcomes than if those individuals acted alone. This phenomenon is particularly evident when the self-interests of individuals culminate in detrimental collective outcomes, such as the 'tragedy of the commons'. Understanding collective stupidity requires dissecting the failures in collective intelligence. Just as individual stupidity arises from errors in observation, interpretation, memory, or judgment, so too can collective stupidity. These failures can be observed in any group, organisation, or society, where critical elements of intelligence, such as creativity, empathy, and wisdom, are imbalanced or ineffective. Collective stupidity often stems from an imbalance in the components of intelligence. For instance, an overemphasis on data collection without proper interpretation can lead to poor judgment. Similarly, clinging to outdated memories or models can result in catastrophic errors. These failures at the collective level mirror individual cognitive failures, where maintaining a balance between the elements of intelligence is crucial for effective action. A more profound cause of collective stupidity lies in the inability to establish and utilise learning loops—systems that recognise and adapt to new environments by revising cognitive frameworks. Collective stupidity emerges when errors go uncorrected, often due to weak feedback mechanisms. The persistence of collective stupidity can be attributed to several forces that obstruct error correction and adaptation. Two primary drivers of collective stupidity are the tendency to conserve cognitive energy and to seek positive social feedback. Intelligence requires significant energy and attention, leading us to default to easier, less taxing cognitive shortcuts. This conservation of energy manifests in routine behaviours that, while efficient for everyday tasks, hinder deeper, more reflective thinking necessary for complex problem-solving. Evolution has ingrained in us a strong tendency to form and commit to groups. However, this commitment can lead to collective stupidity when loyalty overrides critical thinking, suppressing necessary observation, interpretation, and judgment. Groups often develop strong identities that foster cooperation but can also blind them to reality. These identities, reinforced by symbols, rituals, and narratives, can outlast their usefulness and obstruct accurate perception and decision-making. Human suggestibility, while useful for learning and cooperation, can amplify errors in group settings. This tendency leads to bandwagon effects, where shared errors spread rapidly, creating collective delusions or panics. History is replete with examples of nations engaging in self-destructive behaviours—driven by groupthink, conformity, and an inability to process

[67] Geoff Mulgan (2024). A theory of collective stupidity: laziness, likes and lemmings. [online]. Available at: https://www.geoffmulgan.com/post/a-theory-of-collective-stupidity-laziness-likes-and-lemmings [Accessed 25 Aug. 2024].

complex dynamics—that lead to national decline or collapse. Conformism, driven by the need for group coherence, often suppresses critical information and divergent thinking. This leads to collective blind spots, where groups fail to recognise or address significant errors. In essence, collective stupidity and the planned obsolescence of language are natural phenomena within large social groups. As language and communication become more complex, the potential for miscommunication and semantic entropy increases. However, these dynamics are not inherently negative; rather, they reflect the natural evolution of social and cognitive processes. By recognising and addressing the factors that contribute to collective stupidity, we can better harness the power of collective intelligence for the benefit of society.

5.3. Babbling Ape

Talking gorilla?

Koko the Talking Gorilla became a global sensation, largely due to her apparent ability to communicate using American Sign Language (ASL), sparking debates and emotional connections around the possibility of interspecies communication. Over the decades, Koko appeared in documentaries, books, and interviews, fuelling the belief that she could express thoughts, emotions, and desires through signs, elevating her to a symbol of animal intelligence. The 1978 documentary 'Koko: A Talking Gorilla' captured this, portraying her as a breakthrough in understanding animal cognition. However, the scientific perspective on Koko and other apes trained in sign language, such as Nim Chimpsky, has shifted dramatically. Critics argue that rather than engaging in genuine, creative language use, these apes were largely mimicking human handlers, responding to subtle cues rather than forming original thoughts. Herbert Terrace, one of the most prominent critics, concluded that much of what was perceived as language in these apes was behaviour driven by conditioning. The signs Koko used were often requests for food, affection, or basic needs, not the complex, spontaneous communication we associate with human language. Herbert S. Terrace, a prominent critic of ape language studies, argued that Koko's apparent ability to use sign language was not as meaningful as many believed. In his article[68] 'Why Koko Can't Talk: The Ape's Still Fooling Most of the People, Most of the Time', Terrace contends that Koko and other apes were not genuinely communicating through language but rather mimicking their handlers in exchange for rewards. According to Terrace, these apes were responding to subtle cues from their trainers rather than forming original, complex thoughts, which would suggest true linguistic ability. Terrace’s scepticism is rooted in the idea that while Koko could use signs to make requests, such as asking for food or attention, these interactions were largely non-grammatical and lacked the creativity and structure seen in human language. Much of Koko's behaviour, Terrace and others argued, was misinterpreted by well-meaning researchers who projected human traits onto the gorilla. Despite the emotional connection that Koko's story fostered around the world, particularly with her bonding moments like adopting a kitten, the scientific consensus has shifted toward the view that Koko’s communication was not as groundbreaking as initially thought. It was more likely a result of conditioning rather than evidence of true linguistic comprehension. The reason apes, like Koko, are 'fooling most of the people, most of the time'

[68] Terrace, Herbert S (n.d.) Why Koko can’t talk: The ape’s still fooling most of the people, most of the time. The Sciences. [Online] 22 (9), 8–10.

lies less in the apes' abilities and more in human psychology—specifically, our deep desire to believe in animal intelligence and connection. As Herbert Terrace and other critics argue, the emotional appeal of projects like Koko's creates a powerful narrative: humans want to believe that animals, especially primates, can communicate in ways that mirror human language and emotion. This desire taps into a fundamental longing for connection across species, reflecting a broader human tendency to project intelligence, empathy, and other human traits onto animals. One key factor is anthropomorphism, the practice of attributing human characteristics to non-human entities. People are naturally inclined to see human-like behaviour in animals, and the idea that animals can express themselves using human language is particularly compelling. Koko, for example, seemed to demonstrate emotions like affection and sadness, and her use of sign language, however simplistic, gave many the impression that she was communicating on a deeper level. These narratives are not only heartwarming but also affirm our desire to see ourselves in the natural world, blurring the lines between human and animal intelligence. Much of this belief stems from dreaming and a tendency to misinterpret the apes' conditioned responses as genuine linguistic communication. Rather than true language, what we often see in apes like Koko are highly trained behaviours, driven by rewards and guided by subtle cues from their handlers. In the end, people are 'fooled' not because apes are tricking them intentionally, but because humans want to be fooled. The emotional and symbolic significance of bridging the gap between humans and animals leads many to overlook the scientific limitations of these studies, focusing instead on the heartwarming moments that reinforce our desire for connection.

Conversation with imposter

A 2015 article[69] from The Atlantic is called 'A Conversation With Koko the Gorilla, An Afternoon Spent with the Famous Gorilla Who Knows Sign Language', and the scientist who taught her how to 'Talk'. The quote from the end of the article: 'Allegations of selective interpretation have accompanied ape-language research from the beginning. Still, it was impossible to be there interacting with her, and not feel that I was in the presence of another self-conscious being.' This captures the profound emotional impact Koko had on those who interacted with her. Despite the scientific scepticism surrounding her ability to truly use language in the human sense, Koko's interactions often left people feeling that they were in the presence of an intelligent, self-aware being. It reveals how deeply humans seek to recognise themselves in other creatures and how powerful those moments of apparent understanding can be, regardless of the scientific outcome. The 2022 article[70] 'Koko the Impostor: Ape Sign Language Was a Bunch of Babbling Nonsense' reinforces this scepticism. It suggests that the belief in Koko's linguistic abilities was based more on human projection and a desire to see animals as capable of human-like communication than on rigorous scientific evidence. Researchers found that the grammar and structure of Koko's 'conversations' were inconsistent,

[69] Roc Morin (2015). What Koko the Sign-Language-Speaking Gorilla Can Teach Us About Being Human. [online] The Atlantic. Available at: https://www.theatlantic.com/technology/archive/2015/08/koko-the-talking-gorilla-sign-language-francine-patterson/402307/.

[70] Hartsfield, T. (2022). Koko the Impostor: Ape sign language was a bunch of babbling nonsense. [online] Big Think. Available at: https://bigthink.com/life/ape-sign-language/.

and much of the interpretation was generous or selective. While her ability to use signs was remarkable in some respects, it was far from proof of language use as we understand it. The study of ape sign language, once seen as groundbreaking, is now largely discredited, with critics arguing that apes were simply mimicking their handlers rather than engaging in meaningful communication. Apes like Koko and Nim Chimpsky appeared to sign words and phrases, but a closer analysis revealed that their actions were more about imitating human gestures than expressing original thoughts. Researchers discovered that apes were often responding to subtle human cues, leading to overly generous interpretations of their behaviour. Many of the 'conversations' were non-grammatical and consisted mostly of requests for food or affection, not complex or creative thoughts. While the idea of animals communicating in human language is emotionally appealing, the reality is more complex. Despite heartwarming anecdotes, evidence suggests that apes were not forming sentences or engaging in true language. Instead, much of their behaviour was cherry-picked and over-interpreted. The study of ape sign language has largely fallen out of favour in the scientific community, viewed now as more of an experiment in human-animal interaction than in animal communication. What was once celebrated as groundbreaking is now reinterpreted as a form of babbling—fascinating but far from the linguistic breakthrough once imagined. In the end, the story of Koko reflects not only the limitations of animal communication but also the complexity of human hopes and the tendency to understand the nature of language. It seems like the mere desire to communicate is seen as a form of intelligence, though it might not align with conventional definitions of cognitive intelligence, which often emphasise problem-solving, abstract thinking, or language-based reasoning. In the context of animals like Koko the gorilla, the desire to communicate—even if it does not meet the linguistic standards of human language—demonstrates a level of social intelligence. It shows an awareness of others and a need to bridge understanding. Even though Koko's signing may not have been a full linguistic expression, her willingness to use signs to express basic desires, emotions, and intentions highlights a fundamental aspect of intelligence: the drive to interact and relate with others in meaningful ways. Communication, whether through gestures, vocalisations, or other means, often indicates that an individual can recognise the existence of others and understand the importance of connection. In this sense, the desire to communicate is an adaptive form of intelligence, deeply tied to survival and social dynamics, whether in humans or animals. What is the difference between the Babbling Gorilla using language for food and attention, and the hundreds of authors who wrote thousands of articles about Koko the Talking Gorilla just for profit and popularity? Is it the way we use language as a tool that really separates us humans from apes and machines? What if some humans are using language like Koko the Imposter?

Babbling man

Communication is not a perfect or flawless transmission of ideas; rather, it is often messy and fraught with errors, ambiguities, and emotional complexities. It seems obvious that the communication process inevitably includes elements like miscommunication, misunderstanding, absurdity, and even madness or nonsense as integral parts of the broader desire to communicate. This imperfection is what makes communication a deeply human (and sometimes animal) endeavour, driven by the need to connect despite these inherent obstacles. Maybe the difference between Koko the Imposter and The Babbling Man is not so far? Humans and animals are predictably irrational. Miscommunication and misunderstanding are natural

byproducts of the communication process. People often interpret messages based on their own experiences, biases, and cultural contexts, leading to gaps in understanding. Absurdity and nonsense can arise when language or signals fail to align with the intended meaning, yet even these moments of confusion are part of the ongoing effort to make meaning. These breakdowns can sometimes lead to new forms of understanding or creativity, as individuals adapt, clarify, or reframe their messages. Stupidity and madness—often seen as failures of logic or reason—also play a role. These elements highlight the emotional and irrational dimensions of communication. For instance, emotional responses, impulsive reactions, or socially conditioned behaviours can sometimes override logical dialogue, but they are still expressions of the desire to engage with others, even when they seem irrational. Ultimately, communication is a dynamic and complex process that reflects the full range of human (and sometimes animal) experiences. The presence of miscommunication, absurdity, and even nonsense does not diminish the value of communication; rather, it underscores the depth of the desire to connect despite the barriers that arise. These imperfections make communication a living, evolving process rather than a static exchange of information. The cultural hero is often in a situation of a communication breakdown. The figure of the 'fool' holds significant importance in the myths and narratives of civilisation, both in ancient and modern times. This archetype of the wise fool continues to resonate in films like 'Being There'(1979) and 'Forrest Gump'(1994). The 'fool' often represents an outsider, someone perceived as lacking conventional intelligence or social awareness, yet their simplicity and innocence allow them to navigate the world in ways that reveal deeper truths about society, human nature, and the absurdities of power. In traditional myths and folklore, the fool plays a pivotal role as a truth-teller or a disruptor, often unburdened by the complexities of logic, status, or ambition. In 'Being There', Chance the Gardener becomes an influential figure despite his lack of education or awareness of the world beyond gardening. His simple, almost nonsensical statements are interpreted by those around him as profound, reflecting how society often projects meaning onto figures that seem wise but are, in fact, detached from deeper understanding. His 'foolishness' allows him to navigate the highest circles of power with ease, showing how absurdity and miscommunication can lead to influence and status in certain contexts. Similarly, Forrest Gump presents a character whose perceived limitations in intelligence allow him to move through life with remarkable success, largely because he approaches situations with sincerity, openness, and a lack of cynicism. Forrest’s simplistic view of the world enables him to participate in major historical events and develop meaningful relationships without being bogged down by the complexities and struggles others face. His naivety gives him a kind of wisdom—rooted in kindness and perseverance—that allows him to thrive in an otherwise chaotic and unpredictable world. In both cases, these modern 'fools' subvert traditional expectations of intelligence, offering a critique of societal structures and norms. They reveal that intelligence is not always what it seems, and that wisdom can come from unexpected places. Their stories highlight how absurdity, miscommunication, and simplicity can lead to deeper truths, reinforcing the ancient archetype of the fool as a figure who disrupts and enlightens. Thus, the fool remains a powerful truth-telling figure in culture, showing that beneath their apparent madness or simplicity lies an alternative form of wisdom that exposes the contradictions, absurdities, and follies of society.

Fear of stupidity

In 'Who is Afraid of Stupidity?'[71] Yonathan Listik posits that the fear of stupidity is a fear reserved for the intelligent—those who recognise its destructive potential. Stupidity, unlike malice, is often unintentional, a byproduct of ignorance rather than a deliberate act of harm. This distinction is crucial, for while malice can be confronted and resisted, stupidity remains an insidious force, unyielding to reason and logic. However, this fear is not necessarily grounded. When we examine historical atrocities like colonialism and eugenics, it becomes evident that these were not the products of stupidity but rather of a cold, calculated intelligence. The so-called progress of civilisation has often been driven by a form of intelligence that rationalises and justifies domination, violence, and dehumanisation under the guise of order and reason. Intelligence, in its pursuit of totalising knowledge and control, has been complicit in some of the darkest chapters of human history. The experiments of various economic policies with disastrous results are all examples of intelligence being wielded as a tool of oppression. These are not accidents of history; they are the logical outcomes of a civilisation that equates intelligence with superiority and progress with domination. The narrative of progress, upheld by intelligence and reason, is often a veneer for systemic violence and control. The very constructs of rationality, agency, and citizenship are not objective truths but are instead products of a disciplinary regime that naturalises and perpetuates inequality and oppression. Given this historical context, the question arises: why are we so afraid of stupidity? If intelligence has led us to such destructive ends, might stupidity offer an alternative? This is not to suggest that we should embrace ignorance, but rather that we should critically examine the assumptions and values that underpin our worship of intelligence. The concept of intelligence, as it is commonly understood, often serves to reinforce existing power structures. Those who deviate from the dominant narrative—whether they are labelled as stupid, irrational, or uneducated—are marginalised and silenced. Yet, as history has shown, the 'intelligent' actions of those in power have often led to far greater harm than the so-called stupidity of the masses. In this light, perhaps we should not be so quick to dismiss stupidity. It may be that what we label as stupidity is simply a refusal to conform to the logic of domination and control. If intelligence is the driving force behind a civilisation that perpetuates violence and inequality, then perhaps it is time to reconsider the value of stupidity—not as a lack of intelligence, but as a resistance to the destructive logic of progress. The political implications of this are significant. The desire to govern, to impose order and rationality, is inherently violent because it is always already a desire to dominate those who are deemed incapable of self-governance. In this sense, the fear of stupidity is a fear of losing control, of disrupting the established order. But perhaps this disruption is exactly what is needed. If civilisation, as it is currently constructed, is defined by domination and violence, then embracing stupidity—however counterintuitive it may seem—could be a way to subvert that order. This is not a call to abandon intelligence but to critically interrogate the assumptions and values that underlie it. The imperative to be intelligent, to always seek the 'best' and most 'rational' solutions, may be leading us down a path of destruction. By challenging this imperative, we open the possibility for alternative ways of thinking and being—ways that do not necessarily conform to the logic of domination and control. In conclusion, the collective phenomenon of stupidity, when viewed through the lens

[71] Listik, Yonathan(2021) Who is afraid of Stupidity? Available at: https://www.philosophie.ch/attachment/374/download/Listik-paper+docx [Accessed 25 Aug. 2024].

of language and communication, suggests that as societies grow and their languages become more complex, the potential for miscommunication and semantic entropy increases. This is not inherently negative; rather, it is a natural byproduct of social and linguistic evolution. By recognising the limitations of intelligence and the potential value of what we dismiss as stupidity, we may begin to imagine new possibilities for a more just and equitable world.

'In Praise of Obsolescence'

(In the style of Erasmus)

Hail, O folly of words! I come to sing your praises in this age of endless verbosity, where the currency of language is minted not in the purity of meaning, but in the sheer abundance of words. How delightful it is to see that the creators of language—those noble writers, tireless media, industrious publishers, cunning politicians, and learnt institutions—have mastered the art of making language itself disposable! For what value is there in plain speaking and clear understanding when there is profit to be had in the ceaseless churn of linguistic excess? Consider the scholars, who once were guardians of wisdom. Now, they labour not for the pursuit of truth, but to produce volume. The academic presses overflow with books and journals, each more esoteric than the last, each more fleeting in its relevance. In their hands, language is not a tool for clarity, but a commodity to be repackaged and sold anew with each passing season. The pursuit of knowledge has become the pursuit of novelty, and in this, dear folly, they have become your most loyal servants. The media, too, have embraced your doctrine with fervour. News is no longer about informing the public, but about filling the airwaves and screens with a torrent of words. The content must be endless, the cycle unbroken, for the true value lies not in the message, but in the constant, unrelenting production of language. Whether understood or not, whether meaningful or not, the words must flow, for it is in their sheer quantity that the profit lies. Publishers, once the gatekeepers of literary merit, now thrive on this planned obsolescence. They know well that a timeless book is a book that cannot be sold again. And so, they encourage the creation of works that will quickly fade, to be replaced by the next wave of linguistic products. How splendid it is that they have turned language into a consumable, where the value is found not in what is said, but in how quickly it can be forgotten, and how soon it can be replaced. Politicians, ever the clever strategists, have also learnt your ways. They speak not to be understood, but to obfuscate, to cloud the minds of the masses with an ever-shifting array of slogans, buzzwords, and empty rhetoric. For in confusion lies power, and in the constant reinvention of language, they maintain their control. They craft speeches that are destined to be obsolete before the ink is dry, for a language that is stable and clear is a language that does not serve their ends. Even the institutions of education, where one might hope for refuge from this madness, have succumbed. They teach not the enduring principles of clear thought and expression, but the ever-changing lexicon of the day. Students are trained not to communicate with clarity, but to navigate the labyrinth of jargon that is constantly being constructed and deconstructed. They are prepared not for a life of understanding, but for a life of constant linguistic consumption, where the goal is not to say something worth saying, but to say something new. And so, O folly, you reign supreme in this world of planned obsolescence. Language, once the means of human connection and understanding, has become a tool for profit and power. We are no longer concerned with the truth of our words, but with their quantity, with their marketability, with their ability to generate more language. We are lost in a sea of

words, adrift on a tide of endless, meaningless language, and it is you, folly, who have led us here. But let us not despair, for in this grand spectacle of obsolescence, there is a kind of beauty, a kind of twisted genius. After all, what could be more fitting for a world so obsessed with progress, so enamoured with the new, than to make language itself a victim of planned obsolescence? And so, let us praise this folly, this absurdity, for it is the truest reflection of the age in which we live. Hail to the entropy of endless words! Hail to the language that is here today and gone tomorrow! The conspiracy of speech that it is made to break. The falling tower of babble. Hail to the folly of obsolescence!

1. ORIGIN OF SPEECH

1.1. Talking ape

(From grunts to grammar: Tracing language's slow evolution)

'Language evolved as a tool for social coordination, not as a means of abstract representation'.

— Terrence Deacon, The Symbolic Species

'We speak not only to tell others what we think, but to tell ourselves what we think'.

— Oliver Sacks, Seeing Voices

The talking ape

Language did not emerge fully formed or through a sudden leap in human cognition. In 'The Talking Ape: How Language Evolved[72]', Robbins Burling outlines a step-by-step development, showing how modern grammar slowly emerged through a combination of intuitive communication, social interaction, and incremental refinement. Unlike theories that posit an abrupt biological shift, Burling proposes that syntax, the rules that structure language, developed gradually from more primitive expressions of meaning. The journey begins with isolated words—simple, referential utterances that needed no grammar. Over time, early speakers began pairing words to convey more nuanced meanings. New combinations lacked structure but signalled relations through intonation, rhythm, and context. The order of words began to matter. Phrases would come to imply different intentions, giving rise to the first patterns of word order and suggesting the early seeds of syntax. A major driver of linguistic evolution was a process called grammaticalisation. Words used frequently in specific contexts became streamlined, compressed, or repurposed into grammatical markers. Over generations, phrases and concrete terms extended into abstract usage. These shifts, though small, accumulated into the elaborate systems of grammar we see today. Importantly, these changes

[72] Burling, R. (2005).The Talking Ape: How Language Evolved. Oxford: Oxford University Press.

often happened not by design but through common usage—by speakers seeking efficiency and listeners demanding clarity. As more words clustered together, the need for relational terms grew. Function words like 'and', 'but', and 'if' emerged to link ideas. What started as simple naming and pointing evolved into structures capable of expressing logic, causality, and time. In this new space, humans began to distinguish subjects from objects, and verbs from nouns—not by innate categories, but through habitual usage and social reinforcement. Children and their tendency to simplify and regularise input helped refine language. Inconsistent patterns from adult speech were filtered through the child's mind into more consistent rules, which were then adopted by the next generation. In this way, linguistic structures evolved both biologically and culturally, shaped by the minds of speakers and the demands of communication. Rather than imagine grammar as a rigid system appearing overnight, Burling paints a picture of slow construction, built brick by brick through countless interactions. Early humans did not need a perfect syntax to communicate effectively; they needed only enough structure to be understood. Over millennia, the scaffolding of modern grammar emerged from these minimal foundations, through play, repetition, and necessity. Language, in this view, is not a miracle or mystery—it is a human invention. Like tools, it evolved to meet practical and social needs, shaped by the hands and voices of countless speakers before us.

What has language done to us?

Language did not just help humans survive—it reshaped what it means to be human. In the chapter 'What Has Language Done to Us?', Robbins Burling shifts the focus from speculative origins to the lived consequences of language: not how it began, but what it has done. Far more than a tool for exchanging information, language became the scaffolding of social life, thought, and civilisation. It bound individuals together in invisible structures, shaped our memories, gave names to the unseen, and even changed how people perceive themselves and others. Unlike most tools, language operates both externally and internally. It is used to persuade and instruct, to deceive and to heal, but also to think. While other species communicate, only humans narrate, accuse, justify, and gossip. The array of speech acts—promises, threats, jokes, flirtations—reflects the principal place language occupies in human social life. Even in communities with little material complexity language brims with nuance. Their vocabulary for social relationships is as rich as any modern society, suggesting that speech is not simply for survival, but for living together meaningfully. Language also rewires the mind. It sharpens memory, clarifies thought, and allows people to imagine futures and reflect on pasts. A name anchors memory. A word allows an abstract feeling to be shared and dissected. Without language, it is not just communication that falters—entire modes of thought disappear. A deaf woman in rural India who never learnt formal sign language could manage her daily life, but her grasp of abstract concepts like kinship or justice was limited. Without words for such ideas, their boundaries remained undefined, unreachable. But language is not always benevolent. The same capacity that allows people to build shared truths can also fuel illusions. Words can inflate, obscure, or twist meaning. Concepts like 'nation', 'honour', or 'eternity' are powerful not because they are precise, but because they are not. Language gave humans the ability to argue about things that do not exist outside of speech—and sometimes to kill for them. Still, through language, knowledge could outlast the speaker. Writing transformed this impermanence. Laws, records, rituals—everything could now persist. The invention of writing, only a few millennia old, accelerated civilisation by stabilising its foundations: memory, obligation, story. Language is uniquely human not because it is innate but because it is both shared and learnt. Every human learns a language by being immersed in a culture. This rare combination makes language both

flexible and enduring. It allows traditions to accumulate and ideas to travel far from their origin. Culture, in its many forms, rides on the back of language.

Origins of language

Speech, distinct from language, is the vocal expression of human communication. Its origin remains one of the most enigmatic and debated questions in science, drawing on biology, anthropology, and linguistics without a single accepted explanation. Though many animals communicate vocally, none do so with the complexity or flexibility of human speech. Speech arose not from a single cause but through layered transformations—biological, cognitive, and social. Its origins reveal how communication is not merely a tool but a force that shaped the human body and mind. Speech did not simply evolve to express language. Rather, language found in speech its most powerful and adaptable voice. Is it possible that language precedes speech? The origin of language marks one of the most profound transformations in the history of life. Language enabled early humans not only to coordinate action and transmit information but also to construct symbolic worlds and shared meanings. Its emergence is not attributed to a single cause or moment but to a slow coalescence of anatomical, cognitive, and social developments. Unlike speech, which refers to a specific vocal modality, language encompasses any system capable of encoding and transmitting abstract thought—spoken, gestural, or written. Yet the path to its emergence remains obscured by the absence of direct fossil traces, leaving only indirect clues: archaeological evidence of symbolic behaviour, genetic mutations, anatomical changes, and contemporary insights into language acquisition and use. For much of modern history, language origins were treated as speculation. In 1866, the Paris Linguistic Society famously banned debate on the subject, discouraging academic inquiry. Yet by the late twentieth century, advances in neuroscience, evolutionary theory, and cognitive science revived the field, grounding formerly abstract questions in empirical research. Competing theories emerged, divided along two main axes: gradual evolution versus sudden emergence, and innate mechanisms versus learnt cultural development. Continuity theories propose that language evolved incrementally from primate communication systems, driven by selection pressures favouring increasingly complex vocal or gestural signs. Proponents highlight the social intelligence of primates, their use of calls, and gestural repertoire. The gestural theory, for example, posits that human language originated in manual signs later transferred to vocalisation as tool use and bipedalism made the hands less available. Support for this comes from the neural overlap in the brain's control of hand and mouth gestures and from the existence of modern sign languages with grammatical sophistication equal to spoken ones. In contrast, discontinuity theories argue that language represents a leap—an unprecedented development with no clear analogue in the animal world. The most prominent version of this is the single-mutation theory, which proposes that a sudden genetic change enabled recursive thought and syntactic structure, giving rise to language as an entire system. Central to this model is the operation known as Merge, thought to underlie all human grammar. While such a theory accounts for the uniqueness of language, it is often criticised for neglecting the incremental, embodied, and cultural dimensions of linguistic development. Some scholars argue that language emerged not from a sudden mutation but through a social transformation that unlocked dormant symbolic capacities. According to this view, exemplified by ritual/speech coevolution theory, language required a shift toward high public trust and accountability. Without such a transformation, symbolic communication would have remained evolutionarily unstable. Even primates like chimpanzees and bonobos possess latent symbolic abilities they rarely use in the wild, suggesting that a supportive social structure—rather than a genetic leap—was key. Only within

such conditions could language, as a system of low-cost signals, become a viable and enduring means of communication.

Roots of language

Human language did not appear out of nowhere, nor does it exist in isolated forms across cultures without some deeper link. In 'Roots of Language[73]', Derek Bickerton argues that understanding where language comes from, how children learn it, and how new languages like creoles emerge are not separate puzzles—they are three parts of the same story. The real insight, he suggests, comes when one stops treating these questions in isolation and begins to look at the human capacity for language as a unified, biological, and cultural phenomenon. Bickerton starts where few linguists do—with creole languages. These are not just linguistic leftovers or simplified pidgins. When a community of speakers creates a creole, they are doing something remarkable. Children, often with limited and inconsistent input from older generations, build a full, complex language system in just a generation. This, Bickerton says, reveals a deep cognitive blueprint at work—a kind of 'bioprogram' that humans are born with. It is not copying; it is invention. That same creative force is visible when children learn to speak. No one teaches them grammar formally. Instead, they make sense of language by testing patterns, forming structures, and even making consistent 'errors' that hint at innate rules. These patterns mirror the innovations seen in creole formation, suggesting that the child's mind does not passively absorb language—it actively constructs it. But where did this bioprogram come from? Language did not emerge fully formed, and humans did not suddenly start speaking complex sentences one day. The answer, Bickerton proposes, lies in evolutionary processes shaped by natural selection. Over time, our ancestors developed cognitive tools—like symbolic thinking and recursive processing—that allowed for the rise of structured language. These tools did not evolve for language alone, but once in place, they made language possible. There is a paradox here, though. If language is unique to humans, how did it evolve from creatures that did not have it? Bickerton addresses this 'continuity paradox' by suggesting that language did not require a sudden leap, but rather a convergence of mental abilities that, once assembled, opened the door to linguistic expression. Just as walking did not appear overnight but evolved through gradual anatomical changes, language came about through overlapping pressures and slow shifts—biological, cognitive, and social. Language is not just a cultural artefact, nor just a biological instinct. It is both—a product of evolution and of daily human invention. And rather than being built from the top down by complex societies, it seems to arise from below, shaped by individuals equipped with the tools to build meaning from almost nothing. 'Roots of Language' does not just trace the origin of words—it seeks the origin of meaning itself, in the minds and mouths of those who must speak even before they understand what speaking means.

Language in our brain

Human language is a singular achievement of evolution, enabling not only communication but also abstract reasoning, storytelling, and cultural transmission. What makes this capacity uniquely human is not just the use of sounds or gestures, but the ability to generate and understand complex hierarchical structures—sentences within sentences, thoughts layered with intent, reference, and memory. This sophisticated linguistic ability is underpinned by specific features of the human brain, particularly its architecture for syntactic processing.

[73] Bickerton, D. (1981).Roots of Language. Ann Arbor: Karoma Publishers.

Angela D. Friederici, in her book[74] 'Language in Our Brain: The Origins of a Uniquely Human Capacity', offers a detailed exploration of these neurobiological foundations and the evolutionary developments that made language possible. One of the core questions Friederici addresses is why humans alone can process grammar with such precision and spontaneity. When people speak, they do not consciously follow grammatical rules, yet they intuitively structure phrases that reflect the principles of syntax. This fluency is enabled by a dedicated neural network centred on Broca's area, located in the left inferior frontal gyrus, and the posterior superior temporal gyrus (STG). These regions are connected by a dorsal fibre tract known as the arcuate fasciculus. This connection is crucial for hierarchical syntactic processing, allowing humans to combine words into nested, recursive structures. While other animals, such as primates and songbirds, display impressive cognitive and vocal abilities, they lack the neural architecture for complex syntax. Songbirds can learn and reproduce sequences of sounds and even exhibit forms of phonological syntax. Non-human primates can understand basic rule-based patterns, yet neither group shows evidence of recursive, embedded structures—a hallmark of human language. Studies have shown that while Broca's area exists in primates, the critical dorsal pathway linking it to the STG is either absent or underdeveloped. In humans, this tract matures slowly during childhood, correlating with the period of language acquisition and suggesting an extended developmental window for linguistic specialisation. Friederici also addresses the debate over the gestural origins of language. Some theorists propose that manual gestures were the foundation of early communication, later evolving into vocal language. Neuroscientific evidence complicates this view. Although gestures and speech both activate Broca's area, they rely on different connectivity patterns. Syntax processing in speech requires interaction between Broca's area and the posterior STG via the arcuate fasciculus—connections not found in gesture-related neural activity. This suggests that while gesture may have played a role in early communication, the capacity for syntax required a distinct neural pathway. Genetic evidence adds another layer to this picture. The FOXP2 gene, often associated with language, appears in both humans and other animals, but mutations in this gene in humans result in significant speech and language deficits. This implies a regulatory function over other genes involved in brain development. Genetic divergence related to language likely began around 300,000 to 400,000 years ago, possibly before the emergence of anatomically modern humans. These changes supported the growth of neural structures essential for language, particularly those enabling syntactic computation. How the brain got language? Language did not appear in a single moment. It was not gifted to humans like a divine spark or switched on by a gene. It emerged gradually, as a complex dance between body, brain, and culture. 'How the Brain Got Language: Towards a New Road Map[75]', edited by Michael A. Arbib, is a collection of studies that treats language not as a singular invention but as the long result of biological shifts and social transformations. Together, they suggest that language is not a single miracle but a slow layering of gesture, sound, memory, trust, imitation, and emotional expression. One of the volume's core ideas is the 'language-ready brain'. That term does not mean early humans could already speak, but that they had the neural foundations—developed from earlier primates—that made speech possible. These foundations did not emerge in isolation. They were shaped by the demands of social life: the need to coordinate, persuade, nurture, remember, and imagine. The real pivot point seems to lie not just in biology but in culture. Cooperative breeding, for example—the way humans care for one another's young—may have demanded new levels of

[74] Friederici, A.D. (2017). Language in Our Brain: The Origins of a Uniquely Human Capacity. Cambridge, MA: MIT Press.

[75] Arbib, M. A. (ed.) (2020).How the Brain Got Language: Towards a New Road Map. Amsterdam: John Benjamins.

coordination, emotion sharing, and turn-taking. These social behaviours may have created the pressure for more elaborate communication systems. Language, after all, is not just a code in the brain. It is a social bond, a cultural artefact, and perhaps the most fragile and powerful thing humans have ever made. Language is both a cultural invention and a biologically grounded capacity. It is shaped by evolutionary pressures and expressed through specialised neural networks. Syntax—the combinatorial heart of language—is not learnt by rote but emerges from the structural and functional organisation of the human brain. This capacity defines Homo sapiens as 'Homo loquens', the speaking human, whose systems of knowledge and societies are built through language.

Our reptilian brain

To speak is not just to make sounds—it is to activate something ancient and complex inside the human brain. In 'Human Language and Our Reptilian Brain[76]', Philip Lieberman explores how speech and thought are deeply tied to parts of the brain that long predate language itself. Beneath the neocortex, under the folds and regions people often associate with higher reasoning, lies a network of older systems: the subcortical structures, the so-called 'reptilian brain'. These systems, responsible for movement, sequencing, and survival, now underpin some of the most sophisticated human behaviours, including language. It is tempting to think of speech as a purely modern invention, the product of big brains and cultural complexity. But language does not emerge from nowhere—it is built on older capabilities. The same neural circuits that once helped early vertebrates coordinate their limbs now help humans coordinate sentences. Lieberman argues that structures like the basal ganglia, long involved in sequencing motor actions like walking or chewing, have been co-opted for sequencing syllables and syntax. The evolutionary story of speech, then, is one of repurposing rather than reinvention. And yet, this repurposing came with trade-offs. The human vocal tract, adapted to produce a wide range of speech sounds, also makes people more likely to choke. Unlike other primates, humans have a larynx that sits lower in the throat, creating a longer resonating chamber and allowing for the full palette of vowels that form the basis of spoken language. But this same anatomy turns the mouth and throat into a precarious balancing act between breathing, eating, and speaking. From an evolutionary perspective, such a risky modification makes sense only if the payoff—language—was enormous. What about grammar, that intricate scaffolding that holds sentences together? Traditional linguistic theories, particularly those tied to the idea of a Universal Grammar, suggest that humans are born with a built-in blueprint for syntax. Lieberman pushes back. Instead of imagining a hardwired 'language organ', he points to the brain's plasticity. Children learn to speak through experience and repetition, not through decoding a genetic manual. The circuits for speech and syntax are shaped by use, not prewritten rules. Chimpanzees, for example, can learn dozens of signs or symbols. They grasp rudimentary combinations—basic syntax—but never develop fluent speech. Their vocalisations are tightly linked to emotional states and lack the voluntary control seen in humans. Lieberman takes this as evidence that while some linguistic capacities are shared with other primates, speech as humans know it is a uniquely evolved trait, supported by changes in brain anatomy, vocal structure, and cognitive flexibility. Ultimately, human language is not just a function of cerebral complexity—it is an echo of much older patterns, reassembled for new purposes. The voice, the sentence, the pause between words: all of it emerges from neural machinery shaped long before humans learnt to talk.

[76] Lieberman, P. (2000) .Human Language and Our Reptilian Brain: The Subcortical Bases of Speech, Syntax, and Thought. Cambridge, MA: Harvard University Press.

Catching Language

Writing a grammar is not just a technical exercise—it is a human act of attention, respect, and memory. It asks the writer not only to describe how a language works but to find a way of speaking 'about' that language that remains faithful to its own logic. For many of the world's 6,000 languages, this task is not merely academic—it is a fight against forgetting. In 'Catching Language[77]', Nicholas Evans and Alan Dench describe grammar writing as a standing challenge: one that demands intellectual clarity, cultural humility, and a lot of patience. At first glance, grammar seems like a tidy system—rules, categories, examples. But the real work of capturing a language in its full complexity rarely fits neatly into a chart. A language breathes; it shifts in tone and rhythm, changes shape depending on who is speaking and who is listening. The challenge, then, is not only to be accurate but to be fair—to make space for variation, nuance, and contradiction. Grammars are often written for multiple audiences: linguists, yes, but also teachers, learners, and native speakers themselves. This can make writing feel like balancing on a wire. Make it too technical, and it becomes inaccessible; simplify too much, and it misrepresents the language. One must choose a path between abstraction and reality, between typology and storytelling. What makes the task harder is that many languages lack written traditions. That means the grammar writer cannot rely on old books or documents. They need to listen, to ask questions, to gather hours of recorded speech. Sometimes, they are helped by native speakers who have never seen their language written down. These collaborators become co-authors in all but name—offering insight not just into pronunciation and grammar, but into rhythm, humor, memory, and gesture. Even the structure of a grammar—what comes first, what follows—must be chosen with care. Should the writer start with sounds and build up to meaning, or move from meaning down into the mechanics of expression? No answer is perfect. Languages do not unfold in order. People do not think in neat hierarchies. So, grammar writing becomes an act of translation in a deep sense: not just from one language to another, but from lived experience into structured explanation. Time, too, is a constraint. While the best grammars may take decades to complete, many are written under the pressure of short grants or limited fieldwork. The result is compromise: a careful selection of what can be shown clearly and what must be left for later. Still, even partial grammars can preserve a linguistic world that might otherwise vanish. Grammar writing is about catching language not like a butterfly pinned to a page, but like a story held in memory—part analysis, part preservation, part quiet love for the voices of others.

Evolution, learning, practice

In 'Creating Language: Integrating Evolution, Acquisition, and Processing[78]' (2022), Morten H. Christiansen and Nick Chater argue that language did not emerge fully formed or in isolation, but evolved gradually through the interplay of biological evolution, learning processes, and real-time communication. It is the outcome of countless fleeting interactions—moment-to-moment exchanges that leave behind cognitive impressions, shaping how people speak, learn, and understand. Over generations, these traces become patterns. Some fade, others stabilise, and what remains slowly congeals into grammar, vocabulary, and meaning. In this sense, language is less like a fixed system and more like a living memory of past conversations, gradually refined by the pressures of use, understanding, and transmission. But this view is

[77] Evans, N. and Dench, A. (2006).Catching Language: The Standing Challenge of Grammar Writing. Berlin: Mouton de Gruyter.
[78] Christiansen, M.H. and Chater, N. (2022).Creating Language: Integrating Evolution, Acquisition, and Processing. Cambridge: MIT Press.

often obscured by how language has traditionally been studied. In many linguistic traditions, knowledge is neatly divided: grammar is one domain, usage another; evolution belongs to biology, while acquisition falls under psychology. The result is a fragmented picture, where separate fields develop theories in isolation, often speaking past one another. This fragmentation, however, may be more of a theoretical convenience than a reflection of how language works. The distinction between competence (the knowledge of language) and performance (its use) is a good example. While helpful for building idealised models, it risks missing the point that these two are tightly interwoven. The rules people 'know' are deeply shaped by what their minds can handle in real time. The human brain must process language fast—sometimes too fast to wait for perfectly constructed sentences. This 'Now-or-Never bottleneck' forces listeners to grab meaning in chunks, to process and move on. Over time, these pressures mold the form of language itself, favouring patterns that are easier to handle and remember. Language acquisition, similarly, has often been treated as something separate from language processing—as though children somehow infer abstract rules without speaking or listening. But learning to speak is learning to process. It is a skill, honed by repetition, social interaction, and feedback. Children pick up patterns, not through deduction from grammatical first principles, but through messy, immersive use. Even second-language learners—often used to support theories of innate grammar—show that general cognitive skills, like pattern recognition and memory, are more critical than any built-in language module. This perspective also reshapes how language evolution is understood. Rather than seeing genetic evolution and cultural change as entirely separate, it becomes clear that language's development was driven more by culture than biology. Genes did not program specific rules or syntax; instead, they enabled the kind of flexible cognition and social learning that made language possible. The actual structure of language—the grammar people use today—emerged from cumulative cultural adaptation, shaped by what minds could process and what mouths could say. In the end, what emerges is a vision of language as deeply integrated: a continuous loop between evolution, learning, and processing. To split these apart is to miss their mutual influence. Reconnecting these domains allows for a richer understanding, one that does not try to reduce language to static systems but appreciates it as a dynamic process, rooted in interaction, shaped by memory, and sculpted by time.

Why do we want to talk?

People do not talk just to pass on facts. They speak to connect, to express, to be heard and understood. In 'Why Do We Want to Talk?[79]', Katerina Semendeferi explores how the urge to communicate is not only about intellect but also about emotion. Her work suggests that language, in its full human form, could not have evolved without deep changes in the parts of the brain that handle feelings, motivation, and social understanding. When comparing the human brain with that of our closest relatives—chimpanzees and other great apes—Semendeferi finds no completely new brain regions. Instead, evolution subtly reshaped structures already in place. The amygdala, involved in emotional reactions, became more specialised. The orbitofrontal cortex, which helps judge social situations, grew more complex. The anterior cingulate cortex, which handles motivation and error-checking, strengthened its ties to areas like Broca's region, associated with speech. These shifts, she argues, did not just make speech possible—they made people want to speak. Language became possible not only

[79] Semendeferi, K. (2020) 'Why Do We Want to Talk? Evolution of Neural Substrates of Emotion and Social Cognition', in Arbib, M. A. (ed.) .How the Brain Got Language: Towards a New Road Map. Amsterdam: John Benjamins.

because people could form sentences, but because they cared about sharing, listening, and belonging. Semendeferi's evidence includes insights from disorders like Williams syndrome and autism. People with Williams syndrome, for example, often have strong verbal skills and an unusually high desire to socialise, even though they face cognitive challenges. Their brain structure reveals differences in the same emotional and motivational regions tied to speech in neurotypical people. On the other hand, individuals on the autism spectrum often show challenges in social and emotional communication—again pointing to how central the emotional brain is to the way language works in human life. Semendeferi also notes that the shift from gestures to speech was not just mechanical. It likely followed a deeper rewiring in how humans processed others' feelings and intentions. The hands might have come first, but it was the heart—more specifically, the emotional brain—that pushed communication into the rich symbolic realm we now call language. The road to speech, in this view, ran through the need to cooperate, nurture, warn, and reassure. It was not simply a cognitive arms race—it was a social one. The human infant's long dependency may have demanded more intricate emotional attunement. That meant the brain had to grow not only in size, but in the ability to connect feeling with expression. Semendeferi's approach suggests that people talk not just because they can, but because something in their emotional makeup compels them to. Language, then, is not simply a tool, but an extension of the emotional self—shaped not only by thought, but by care, desire, and the longing to be understood.

Cooperation or display?

People talk far more than they need to. Most conversations are not about solving problems or conveying crucial facts; they drift through memories, opinions, and stories with no clear goal. Yet this casual chatter fills a third of the average person's waking life. The real mystery, as Jean-Louis Dessalles argues in 'Why Talk?[80]', is not how language works—it is why people bother so much. Traditional answers fall short. Explaining language as a tool for coordination, teaching, or hunting does not account for the sheer volume of everyday conversation, especially when it involves trivial or repetitive topics. If the goal is efficiency, why the endless retelling of minor events? Why do people debate for hours, knowing they will not change each other's minds? Dessalles suggests language is less about cooperation and more about 'display'. Not physical display, like in animals, but cognitive and emotional display. Through storytelling and argument, people signal to others that they are aware, attentive, trustworthy, and intelligent. Talking is a way to attract social allies, not unlike a peacock's feathers or a songbird's call—but here, the plumage is narrative skill and reasoned thought. Everyday speech splits roughly into two forms: narratives and discussions. Stories are often emotional or surprising—someone got lost, something unexpected happened, a plan went wrong. The best stories are not just informative; they are 'striking' This quality reveals something about the speaker's attentiveness to the world and sensitivity to social dynamics. A person who spots unusual things may also notice danger early or catch social cues others miss. That is a valuable ally. Then come the discussions—less emotional, more about contradictions, beliefs, or decisions. Should someone be blamed for a mistake? Was that event intentional or random? People debate not just to find answers, but to show they can think clearly, weigh arguments, and stick to their position under pressure. This too becomes a signal—of consistency, logic, and trustworthiness. What makes this dynamic possible is a shift in the rules of survival. For much of primate evolution, dominance and physical strength determined success. But humans changed that. The invention of tools and weapons meant that sheer force no longer guaranteed safety. One's survival

[80] Dessalles, J.-L. (2007).Why Talk?. Oxford: Oxford University Press.

increasingly depended on having allies—people who would warn of danger, share resources, and help when needed. In this new order, language offered a unique advantage. Words became a way to 'show' one's value to the group: emotional honesty, cleverness, and moral clarity could be expressed, judged, and remembered. Instead of fighting for rank, people talked. The best talkers did not just entertain—they earned loyalty and respect. That is why people still talk so much. It is not about facts or instructions; it is about positioning. In modern life, this has not gone away—it is moved to other arenas. Social media, for example, is full of stories and arguments designed to draw attention, show insight, or signal virtue. The instinct to speak and be heard remains strong, not because it is always useful, but because it once helped people survive—and still helps them belong.

1.2. Collective fictions

(From pretend to protocol: The social life of collective fictions)

'We live in a world of shared fictions. Money, states, corporations—they exist because we believe in them'.

— Yuval Noah Harari, Sapiens: A Brief History of Humankind

'Declarations do not describe reality, they change it'.

— John Searle, The Construction of Social Reality

Children's pretence

At first glance, language seems like a straightforward tool: words strung together to pass information from one mind to another. But when people say things like 'you're hired', or 'this land belongs to me', they are changing reality. In 'Language and Collective Fiction: From Children's Pretence to Social Institutions[81]', Emily Wyman explores how language becomes powerful not because of its content alone, but because of the shared social agreement that gives certain utterances force. How do humans manage to treat fiction—agreed-upon stories—as real enough to structure entire institutions? This starts in childhood. When children play pretend, and one says, 'this stick is a sword', the other goes along with it, often correcting those who break the shared illusion. Even in play, children enforce imaginary rules. Wyman sees this as more than fun—it is early training in social imagination. Children are learning how shared intention can turn ordinary objects into meaningful roles or symbols. It is a rehearsal for the adult world, where similar symbolic agreements create money, marriage, or national borders. Language is the key to this transformation. Unlike a painting or a scream, language does not present an experience—it gives instructions for imagining one. When someone hears 'the king is dead', they do not need to see the body; the phrase itself directs the mind to picture what it means. This ability to imagine, and to trust others to imagine with you, is what makes language a technology of collective fiction. These fictions—like the idea of property or citizenship—become institutional facts only when enough people agree to treat them as real. Wyman emphasises that these institutional facts do not float free of context. They exist because people

[81] Wyman, E. (2017).Language and Collective Fiction: From Children's Pretence to Social Institutions. Oxford: Oxford University Press.

agree to follow certain rules. A paper slip counts as money in each economy, or a specific phrase counts as a legal contract in a courtroom. Without shared agreement, the paper is just paper, and the words are just sounds. What is remarkable is that humans, even from an early age, are wired to enforce these rules. They object when others break the shared illusion—not because the facts are physical, but because they have entered a shared reality with expectations and obligations. This intersubjective space, where everyone acts 'as if' something is real, is the foundation of institutions. By looking at how children move from pretend play into more culturally specific forms of role-playing—shopping, school, ceremonies—Wyman shows how these imaginative exercises prepare them to step into adult institutions. Over time, collective fiction becomes second nature, blending imagination with rule-following to create durable social structures. Language is not just a mirror of the world—it is the tool people use to build new worlds together.

Collective inventions

What makes human language unique is not just its structure, but the kind of world it brings into being. Unlike animal communication, which deals with immediate, physical realities—food, danger, territory—language creates shared symbolic worlds. It allows people to act not only based on what is, but on what could be or what is agreed to be so. In 'The Cradle of Language[82]', Chris Knight argues that language is not a spontaneous mutation in individual brains, but a cultural invention born out of social cooperation and collective imagination. Language is often described as digital: it is made of clear, categorical units like phonemes and words, allowing infinite meanings to emerge from finite parts. Yet humans are analogue creatures—emotional, embodied, and prone to ambiguity. So how did such a crisp, rule-based system take hold? Knight suggests that this digital scaffolding did not evolve biologically first. It emerged socially. Early humans developed symbolic practices—rituals, taboos, and shared performances—that gradually turned into systems of meaning. These practices were not just decorative or entertaining; they stabilised trust and enabled social rules to form. One striking example Knight gives is the use of red ochre by early humans. Found at many archaeological sites, it seems to have functioned as a cultural symbol, perhaps marking transitions, fertility, or group identity. The point is not what ochre meant, but that it meant something collectively. Its use helped shift early human groups from instinctive behaviour to shared social contracts, from dominance to cooperation. These collective rituals laid the groundwork for symbolic culture, where meaning is no longer tied to immediate biological signals but to social consensus. Crucially, Knight connects the rise of symbolic culture with the management of reproductive cycles. In early societies, menstruation may have served not just as a biological fact but as a social signal, governed by taboos and rituals. These taboos helped regulate sexual behaviour and competition, promoting group cohesion. Women, through collective practices, may have been central to this shift. By synchronising behaviour around visible signs, groups could create rules—agreements that go beyond brute facts. Language, in this view, did not appear out of nowhere; it grew out of rituals that taught people how to mean things together. This idea has important consequences for how we think about speech. In evolutionary terms, speech is a remarkably cheap and fast way to communicate. Unlike physical gestures or signals, words cost almost nothing to produce. Yet they work—because people agree to treat them as meaningful. Language, then, depends on shared belief and trust. Without social rituals and the rule of law

[82] Botha, R.P. and Knight, C. (2009). The cradle of language. Oxford: Oxford University Press.

behind them, words would be just air. Knight challenges the view that language is mainly a brain-based module that emerged through a rare mutation. Instead, he suggests that language came from the outside in—from social life to the mind. It was invented, not discovered, and it required a collective shift in how humans lived, imagined, and trusted one another.

Social origins of language

Understanding the origins of language requires more than a biological account—it demands a rethinking of language as a fundamentally social phenomenon. In 'The Social Origins of Language[83]', edited by Daniel Dor, Chris Knight, and Jerome Lewis, the authors present a compelling interdisciplinary challenge to dominant theories that isolate language within the brain or treat it as a genetic mutation. Instead, they explore how language emerged from the evolving dynamics of human social life, where cooperation, trust, and cultural innovation created the conditions for symbolic communication to take root and flourish. The book opens by acknowledging the deep mystery surrounding language origins—long considered one of the most difficult problems in science. Because no direct evidence of early language use exists, researchers must rely on circumstantial clues: fossils, archaeological traces, primate studies, and child development. Despite these challenges, the contributors argue that the rewards of inquiry are immense. Language is not only a cognitive faculty but a social achievement that defines human identity and moral responsibility. Traditional theories, especially those derived from Noam Chomsky's view of language as an innate internal faculty (I-language), emphasise grammar as a product of biology and evolution. These theories tend to treat communication as secondary, focusing instead on language as a medium for private thought. The contributors to this volume dispute that framing, proposing instead that language evolved as a solution to the challenges of cooperative life. Speech, they argue, is inherently public. It allows people not just to think but to share and reconstruct each other's thoughts in a process of collective understanding. A key insight is that evolutionary change is often behaviour-driven. Social innovations—such as collaborative childcare, the use of fire, and ritualised bonding—likely preceded and enabled the genetic and cognitive developments that support language. In this sense, language did not emerge in isolation but as part of a broader transformation in human social life. The shift from dominance-based primate hierarchies to trust-based human societies created a space where language could function as a reliable, symbolic system. Ultimately, the book presents language not as a solitary invention or sudden mutation but as a deeply social technology. Its emergence depended on a collective environment marked by shared intentionality, mutual trust, and the ability to transmit symbolic meaning across generations. The human capacity for language is not merely cognitive—it is cultural, ethical, and cooperative at its core.

A communication technology

Language, rather than being merely a biological faculty or an abstract cognitive mechanism, can be understood as a socially constructed communication technology. In 'The Instruction of Imagination: Language as a Communication Technology[84]', Daniel Dor proposes that language emerged not as a fixed evolutionary trait but as a tool developed by human communities to solve a specific communicative problem: how to share experiences that are

[83] Dor, D., Knight, C. and Lewis, J. (eds.) (2014).The Social Origins of Language. Oxford: Oxford University Press.
[84] Dor, D. (2015).The Instruction of Imagination: Language as a Communication Technology. Oxford: Oxford University Press.

inherently private and subjective. Every individual experiences the world through a unique lens—through memories, thoughts, sensations, and perceptions. This experiential variability creates a fundamental challenge for communication. Traditional systems like gestures, facial expressions, or even visual art rely on shared context or direct presentation of experience. They reduce the communicative gap by pointing to things already perceived. Language, by contrast, operates differently: it provides structured 'instructions' that allow listeners to 'imagine' the speaker's experience. This process, which Dor calls the 'instruction of imagination', is the distinctive feature that sets language apart from other forms of symbolic communication. Dor views language as a dual system: a 'symbolic landscape' of shared meanings developed through cultural interaction, and a 'communication protocol'—a flexible, community-based set of rules guiding how these symbols are used. These two components enable individuals to encode fragments of their experience into language, and for listeners to reconstruct these fragments into imagined, internally coherent representations. Language thus acts as a bridge across the experiential divide between speaker and listener. The instructive strategy likely emerged within pre-linguistic hominin societies already proficient in mimetic and gestural communication. As these communities grew more complex—sharing childcare, hunting cooperatively, and navigating distributed knowledge systems—they encountered increasingly difficult communicative demands. They needed to talk about absent objects, invisible relationships, future plans, or moral obligations. These could not be gestured at or shown. Instead, individuals began experimenting with instructive forms of communication, offering partial cues that relied on the listener's ability to reconstruct meaning. As these attempts stabilised, they produced a new communicative technology: language. The process was gradual but directional. Communities began expanding their shared symbolic repertoire, standardising vocal signals, and developing phonological and grammatical rules. The linear combination of discrete symbols into sequences allowed for hierarchical structures and recursive meaning—enabling an exponential increase in expressive power. Seen in this light, language is not an evolutionary accident or a sudden cognitive leap, but a cumulative social innovation. It is comparable to other technologies—such as writing or the internet—in that it solves a specific problem: how to transfer information across minds with minimal shared experience. This understanding reframes language not as a mirror of thought, but as a tool that reshapes both thinking and society. By conceptualising language as a communication technology, Dor's work highlights the cooperative, imaginative, and technical nature of language, emphasising that its origins lie not just in brains, but in communities striving to understand each other.

For a long time, the story of language's beginnings was framed as a sudden leap—something that arrived hand-in-hand with art, tools, and the 'modern human'. But what if that leap was a long walk? In 'The Emergence of Modern Language and Its Implications[85]', Dan Dediu and Stephen Levinson argue that modern language did not burst into existence 40,000 years ago. Instead, it grew slowly, shaped over hundreds of thousands—maybe even a million—years, by human social life, interaction, and cultural change. Language, they suggest, is inseparable from the way people live together. It is not just a brain function—it is a social tool, born in the messiness of cooperation. Early humans did not need perfect grammar to survive. They needed to share plans, warn each other, make sense of strange events. Language is a patchwork technology, stitched together through social needs. Over time, early humans expanded their 'symbolic landscape'—categorising experience, naming it, telling stories. As these linguistic habits were passed on, they grew more complex. Cultural ratcheting—the idea

[85] Dediu, D. and Levinson, S.C. (2013).The Emergence of Modern Language and Its Implications. Cambridge: Cambridge University Press.

that once something useful appears, it can be refined by later generations—played a key role. Language was not just evolving in brains; it was evolving in communities. Language not just what people speak. It is what they inherit, shape, and use to build the world around them.

Language and normativity

People do not just speak—they follow rules when they speak. And when someone breaks one of those unspoken rules, the disruption is immediately felt. Someone talks over another, does not say thank you, interrupts the turn-taking rhythm, or misuses a word, and suddenly the smooth flow of interaction stutters. In 'Forever United: The Co-Evolution of Language and Normativity[86]', Ehud Lamm argues that this shared sense of 'how things should be done'—in both communication and conduct—is not just a feature of human life. It is part of what made human life possible in the first place. The core idea is simple but powerful: language and norms did not evolve separately. They grew together, shaping each other, and they still do. Norms are not just rules we learn; they are ways of making life together manageable. And language is not just a way of expressing thought—it is one of the main ways humans create, spread, and enforce norms. Think about how children learn to speak. It is not just about naming things. They are learning when it is okay to speak, how to take turns, how to say 'mine' or 'please', and what is funny or polite. These early uses of language are packed with normativity. A toddler saying 'bye' and insisting everyone else does too is not just using a word—they are enforcing a social ritual. They have internalised a rule, and it matters to them that others follow it too. Lamm illustrates this beautifully through the example of a child named Dora, whose early words were embedded in social routines. 'Up' was not just a label for direction; it was a request, a command, a shared expectation. 'Mine' was not just about possession—it was about fairness, about asserting rights in a world full of others. Through games, greetings, and small emotional dramas, Dora was not just learning to talk. She was stepping into a world of shared norms. What's striking is how quickly children go from mimicry to moral feeling. They do not just imitate; they care. They get frustrated when others break the rules—rules no one had to spell out. And that emotional response is a clue to something deeper. Lamm suggests that this early moral sensitivity is not just social conditioning. It is part of what makes language work. If you do not care when someone lies or cheats or breaks the rhythm, you cannot build trust. And without trust, language collapses. Over evolutionary time, this link between speech and shared expectations deepened. New ways of talking—commands, questions, promises—evolved alongside new ways of regulating behaviour. Groups that could talk through problems, reason about fairness, and create new rules together had an edge. Language did not just help them cooperate; it helped them build cultures. Language and normativity are two sides of the same human coin. They grew up together in our species—and still grow together in every child.

The social evolution

In 'The Social Evolution of Human Nature: From Biology to Language[87]', Harry Smit challenges traditional theories of language evolution, particularly those grounded in the Chomskyan idea of an innate, genetically encoded Universal Grammar. Instead of imagining language as a system for encoding internal thoughts into external signals, Smit proposes a more grounded alternative: language emerged from social action, from doing things with words. This

[86] Lamm, E. (2023).Forever United: The Co-Evolution of Language and Normativity. Oxford: Oxford University Press.
[87] Smit, H. (2014).The Social Evolution of Human Nature: From Biology to Language. Cambridge: Cambridge University Press.

view aligns language not with abstract rules hardwired in the brain, but with the very fabric of cooperative behaviour in early human societies. Rather than a pre-existing language faculty, Smit argues that early humans developed communicative behaviours out of the need to coordinate group actions—like hunting, caregiving, or sharing food. From gestures like pointing and miming, early humans gradually moved toward vocalisations, extending the range and flexibility of communication. This process, deeply embedded in social life, formed the basis for symbolic expression and language. One of the key strengths of Smit's account is how it situates language evolution within the broader framework of biological and cultural development. Instead of invoking mysterious internal 'states' or inaccessible cognitive structures, he examines how language emerged from observable patterns of interaction. Infants' early communicative behaviours—gaze-following, babbling, pointing—are seen as evolutionary adaptations that anticipate language. These behaviours do not encode abstract knowledge; they foster relationships, teaching, and cooperation. Smit also critiques how Chomsky's model detaches linguistic knowledge from actual linguistic ability. He draws on medical cases like aphasia to show that language is better understood as an ability—something that can be lost, relearnt, or modified—rather than a stored state or static system. The recovery of speech after brain injury suggests that language is tied to functional mechanisms, not buried knowledge. This insight brings the study of language closer to biology, where abilities are developed through interaction between structure, function, and environment. Furthermore, Smit connects the evolution of language with changes in human life history. Early weaning and cooperative child-rearing necessitated greater communicative abilities, particularly between mothers, infants, and other caregivers. Language, in this view, developed as a tool for coordinating social life, not translating inner thoughts. Smit's proposal is that language evolved gradually from shared gestures and vocal behaviours, expanding to symbolic representation through increased social complexity. It was not a sudden biological leap, but a continuous cultural process shaped by the pressures of cooperation, teaching, and coordination. The human capacity for language reflects not a specialised organ but a flexible set of social behaviours deeply rooted in our evolutionary history.

Why do only humans have language?

Language is often seen as humanity's defining feature. While many animals communicate, only humans developed a full, open-ended language system. Robin Dunbar, in his 'Why Only Humans Have Language[88]' (2007), offers a compelling explanation: language evolved not as a technical tool for problem-solving, but as a social glue that bound early humans into larger, more cohesive communities. The starting point for this idea lies in the limitations of grooming, the main method non-human primates use to build and maintain social bonds. Grooming is time-consuming and one-on-one; in large groups, it quickly becomes inefficient. Humans, though, manage to maintain stable social groups three times the size of any other primate. Dunbar argues that this leap was not possible without a new mechanism. Language, he suggests, filled this gap by allowing multiple people to bond simultaneously through shared conversation, gossip, and storytelling. This view challenges older models that framed language primarily to exchange technical information—like how to make a tool or find food. While language certainly supports those uses, Dunbar shows that most human conversation (in every culture studied) is overwhelmingly social. People talk about relationships, reputation, emotions—precisely the kind of information needed to navigate a complex social world. One

[88] Dunbar, R. (2007) 'Why Only Humans Have Language', in Botha, R. and Knight, C. (eds.).The Prehistory of Language. Oxford: Oxford University Press.

strength of Dunbar's approach is its evolutionary coherence. As hominin brain size increased, especially in regions like the neocortex, cognitive capacity expanded. This allowed for deeper layers of intentionality—thinking about what others are thinking. These advanced social skills demand sophisticated communication. Without language, the mental effort required to manage relationships in groups of one hundred or more would become unsustainable. Fossil records support this account. By around 500,000 years ago, humans had developed the anatomical features necessary for speech: changes in the spine for breath control, and modifications in the skull and jaw for articulating sounds. While it is hard to say exactly when language in its modern form emerged, these developments suggest a gradual transition from simple vocal signals to full grammar. Dunbar also compares competing theories, like those proposing that language evolved to impress mates or establish contracts. While these may explain certain aspects of language use, they fall short of explaining how language solves the core problem of social cohesion in large groups. Language enables flexible, fast, and nuanced bonding, and that, according to Dunbar, is its most critical evolutionary function. Ultimately, what sets humans apart is not just that they speak, but that they live in dense, layered social worlds where talk is essential. Language is not just a mechanism—it is the very medium of human society.

Social manipulation

When people talk about how language evolved, the focus is often on cooperation—how humans learnt to share thoughts, work together, and build communities through words. But as Federico Rossano points out in 'Social Manipulation, Turn-Taking, and Cooperation in Apes[89]', cooperation is not always rooted in kindness. Sometimes, it is about strategy. And when it comes to apes—our closest living relatives—the desire to communicate often has less to do with generosity and more to do with subtle control. Rossano's work suggests that if we want to understand the origins of language, we need to look beyond the words themselves. It is not just what is said or how it's understood—it is also why one responds in the first place. This means studying the motives that drive interaction: the push to get something, to influence behaviour, or to maintain a social bond. In the animal world, especially among apes, these motives often involve manipulation rather than cooperation for its own sake. Take turn-taking, for instance. In humans, conversation flows in rapid, coordinated exchanges. But in apes, simpler versions exist too. Young chimpanzees repeat gestures back and forth. Orangutans sometimes take turns offering or withholding food. These are not complex dialogues, but they show early forms of coordinated interaction. Rossano categorises these behaviours from basic mimicry to more interpretive exchanges where gestures are used purposefully to elicit a response. It is here that the link to human language begins to show. Manipulation is especially telling. Orangutan mothers, for example, will use their offspring as social tools—nudging them to retrieve food or to test others' reactions. These are not acts of selfless teaching. They are calculated moves within a larger social game. Similarly, gestures that seem like requests for help often function as probes, revealing the strength of a relationship or testing what another ape is willing to give. This sheds light on a deeper point: the origins of language may be as much about influencing others as they are about exchanging information. Rossano outlines two views—one that sees communication as manipulation, and another that sees it as a system for sharing facts. The truth likely blends both. Apes use signals to get what they want, but also to navigate social life in ways that resemble early human interaction. The key lesson is that cooperation does not always

[89] Rossano, F. (2020) 'Social Manipulation, Turn-Taking, and Cooperation in Apes: Implications for the Evolution of Language-Based Interaction in Humans', in Arbib, M. A. (ed.).How the Brain Got Language: Towards a New Road Map. Amsterdam: John Benjamins.

need goodwill. It can emerge from shared interest or even from self-interest. This challenges the idea that language could only evolve in deeply altruistic settings. Instead, it may have emerged in environments where strategy and social navigation were just as crucial. By studying how apes manage turn-taking, test boundaries, and use social tools, Rossano paints a more nuanced picture of where language came from. It was not just built on empathy—it was built on the complex, often messy reality of social life.

Origins of culture

What separates a mind from a brain? For Robert K. Logan, the answer lies in language. In 'The Extended Mind Model: The Origins of Language and Culture[90]', Logan proposes that language did not merely evolve to help humans describe the world—it created an entirely new way of thinking. It extended the reach of the brain into a shared conceptual space, where abstract thought, cooperation, and culture could take root. Long before grammar or alphabets, humans faced challenges no other species had: complex social structures, shared hunting strategies, tools that required planning, fire that demanded control. These pressures overloaded the perceptual systems that once sufficed for survival. Something had to give. That 'something' was language—not as a sudden invention, but as a tipping point, a bifurcation from simple perception to concept-based reasoning. In Logan's model, this was not just a cognitive upgrade; it was a transformation in how minds were organised. The early words people spoke did not describe things with precision. Instead, they worked like magnets—or as Logan puts it, 'strange attractors'—pulling together many different experiences under a single sign. A word like 'water' did not just mean H_2O; it brought together rain, thirst, rivers, and danger. Words simplified life's chaos by giving it shape, and in doing so, created new ways of understanding. Language, then, is not just spoken—it is shared. Its power does not lie in the individual mind but in the mutual recognition of meaning. This means context is everything. Say something with a smile, and it softens; say the same words in writing, and they stiffen. This dynamic quality makes language both fluid and fragile. Only through trust, convention, and repeated use does it become stable enough to build on. Before speech, Logan argues, humans relied on three proto-languages. Toolmaking brought a sense of sequence—one step must follow another. Social behaviour added structure through grooming, sharing, and coordination. And mimetic gestures—hand signals, facial expressions, postures—became early signs with meaning. These proto-languages helped humans practice pattern recognition and symbolic logic before they ever opened their mouths. The real leap came when concepts took over. Where once a person reacted to a sound or shape, now they could think in symbols, in metaphors, in layered meanings. This leap did not just change communication; it changed people. The 'mind' was born when the brain merged with language—when cognition became distributed, not just inside skulls, but between them. Logan sees three turning points in this process: the move from perception to abstraction, from biology to culture, from archaic hominins to symbol-using humans. In each case, language was the catalyst. And though other species had bigger brains, it was humans—with this strange tool of shared meaning—who reshaped the planet.

[90] Logan, R.K. (2007).The Extended Mind Model: The Origins of Language and Culture. University of Toronto.

Evolution of ultrasociality

Why do humans speak, and why do they speak the way they do? In his chapter from 'Is Sociality a Crucial Prerequisite for the Emergence of Language?[91]', Luc Steels explores the idea that language evolved not simply as a cognitive tool, but as a dynamic social process deeply rooted in human cooperation and interaction. He does not approach this through speculation but through theoretical modeling, using simulations and experiments with robots and artificial agents to investigate how communication systems might have first emerged and evolved. Steels argues that language is a 'complex adaptive system'—a living, evolving network that responds to pressures from both individuals and communities. Unlike rigid, rule-based models like Universal Grammar, this view sees language as flexible and constantly shifting. People do not just follow grammatical rules handed down to them; they innovate, adjust, and repair communication when it breaks down. When someone invents a new word, others adapt to it. Over time, these small adjustments accumulate into stable patterns—a process that mirrors natural selection more than it does top-down instruction. At the heart of Steels' model is the idea of 'repair strategies'. These are the spontaneous efforts speakers make to clarify, rephrase, or negotiate meaning during a conversation. As these strategies become regularised, they shape the grammar and structure of a language. This does not just happen in ancient history—it is something that still unfolds today in the development of new languages, such as creoles, or in contexts where communication is impaired and rebuilt from scratch. To test these ideas, Steels uses 'language games'—simulations where robotic agents try to develop communication systems from scratch. Starting with no shared code, the agents interact, attempt to express things, and gradually invent and align signals. What is remarkable is that, with the right social dynamics, these agents develop properties like syntax, arbitrariness, and even perspective-taking—features central to human language. But it is not just the games that matter—it is the social rules they embed. Without 'joint attention', for example—where two individuals focus on the same thing—these systems collapse. Without the ability to reverse perspective and consider what the other agent might know or think, communication fails. And crucially, without mechanisms for trust and cooperation, like punishing deception or rewarding reliability, the entire communicative structure breaks down. Language does not emerge in isolation. It requires a deeply social environment: one where people are willing to engage, share focus, take others' perspectives, and even trust one another despite the risks. This is what Steels refers to as 'ultrasociality'—the kind of cooperative behaviour that goes far beyond kinship or self-interest. It is the glue that made symbolic culture, and ultimately language, possible.

Minds make societies

Human societies have always appeared both strangely familiar and deeply perplexing. We live immersed in them yet often fail to grasp why they function the way they do. Why, for example, do people care so much about ethnic identity? Why are beliefs—however irrational—so durable? Why does political domination seem so universally accepted? In his book 'Minds Make Societies[92]', Pascal Boyer suggests that to understand these puzzles, we must start not from abstract theory, but from the cognitive architecture of the human mind. The first step is to recognise that social life is not separate from nature. Human groups follow patterns that can be studied like any other biological phenomenon. But unlike rainfall or migration patterns,

[91] Steels, L. (2022) 'The Evolution of Ultrasociality', in "Is Sociality a Crucial Prerequisite for the Emergence of Language?" Oxford: Oxford University Press.

[92] Boyer, P. (2018). Minds Make Societies: How Cognition Explains the World Humans Create. Yale University Press.

societies emerge from minds—specifically, minds shaped by evolution to handle certain recurrent problems. That is why answers to questions like 'Why are some societies more cooperative than others?' require us to look inward, at the cognitive mechanisms inherited from our ancestors. These mechanisms, however, do not work as centralised conscious systems. Rather, the mind operates through multiple specialised inference systems that process specific types of information: moral violations, social signals, threats, alliances. These systems function largely without awareness. People do not reason their way into moral outrage or group loyalty; they feel it, immediately and intuitively. This explains why behaviours that seem irrational—refusing to drink water from a glass labeled 'poison', or punishing someone for symbolic acts—are the result of ancient, fast-acting cognitive processes tuned to detect threats and protect cooperation. Even complex political behaviours, such as loyalty to a leader or compliance with an unjust regime, emerge from systems designed to monitor status, alliances, and dominance. Individuals scan their environment for cues of who holds power, who might punish them, and which group norms are safe to follow. What looks like ideological belief may just be a computational shortcut: follow the leader who looks the most dominant, imitate the group that seems safest. Boyer argues that ethnic identity is not an inherited instinct but a byproduct of our mind's ability to track coalitions. From early childhood, humans are tuned to recognise alliances based on language, ritual, dress, and interaction patterns. Ethnicity becomes salient when these cues signal stable groups worth aligning with. When resources are scarce or competition is high, these cues can harden into rigid boundaries—producing the very conflicts societies often struggle to resolve. Importantly, morality is not a universal code handed down from on high but a dynamic response system. Moral intuitions are generated by mechanisms that detect cooperation, fairness, exploitation, and harm. These mechanisms vary in how they express themselves across cultures, but their underlying function remains the same: to regulate social life by rewarding helpful behaviour and punishing violations. Even our reproductive strategies—who we partner with, when we reproduce, and how we invest in children—are influenced by subtle environmental cues. Children growing up without a father, for example, may unconsciously adapt their strategies in ways that reflect expectations about long-term male support. These choices are not deliberate or reflective but emerge from evolved systems built to detect patterns and adjust behaviour accordingly. Understanding societies, then, is not about decoding abstract institutions or ideologies. It is about unpacking the invisible mental routines that shape human action—routines honed by natural selection to manage the social complexity that defines our species. When we see societies this way, not as mysteries or failures of rationality, but as expressions of ancient mental adaptations, we begin to make sense of even the strangest cultural practices. Societies do not emerge from abstract ideas, constitutions, or conscious planning. They emerge from minds—layered, fragmented, and ancient—that shape and are shaped by the groups they live in.

What is information for?

In 'Minds Make Societies', Pascal Boyer poses a provocative question: why do human minds, built for survival, consume and spread information that appears utterly useless or false? Rumours of satanic rituals in suburban schools, tales of supernatural organ theft, and beliefs in mind-controlling elites are all forms of what Boyer calls 'junk culture'. These beliefs are not marginal but widespread, recurring across time and geography. They persist not despite human cognitive sophistication, but because of it. Human cognition evolved to make rapid inferences under uncertainty. When gathering food, identifying threats, or navigating social alliances, information processing had to be fast, selective, and based on cues that reliably indicated danger or opportunity. These ancient mechanisms remain at work in modern environments saturated

with language and media. The result is a mind that does not simply seek truth—it prioritises relevance, especially information that appears socially urgent or morally charged. This explains why rumours are so often about threats. Negative information carries more weight because missing a potential danger is far more costly than ignoring a harmless detail. Hence, false alarms—claims that someone is poisoning the water, kidnapping children, or stealing body parts—are widespread. Our minds are tuned to overreact to ambiguous signals of danger. Better to believe falsely and avoid risk than to dismiss something that might matter. In this sense, the spread of frightening rumours is not irrational but adaptive. They activate our attention systems, heighten vigilance, and promote social cohesion around shared concerns. But these rumours do more than alert. They mobilise. In many cases, as Boyer points out, people act on them, rallying around shared narratives that define heroes, victims, and villains. Once information is framed in moral terms, it transforms from data into duty. People are no longer just listeners—they become participants, spreading the message not because it is verified, but because it signals loyalty, outrage, or a shared mission. This is what makes 'junk culture' paradoxically useful. It serves functions beyond truth-telling: it helps delineate group boundaries, enforce norms, and structure emotional energy. In the Satanic panic of the 1980s, accusations spread not because of evidence, but because they mapped onto moral fears about parenting, authority, and innocence. Similarly, beliefs in organ theft or black magic do not need proof to feel real—they become real through their social consequences: exclusion, punishment, cohesion. Boyer compares this phenomenon to 'junk DNA'—sequences that seem useless but might carry regulatory functions. In the same way, junk information appears irrational but may shape the emotional and moral architecture of human groups. It teaches people how to respond, whom to trust, and what to fear. And often, those who transmit such information gain status as protectors or insiders, regardless of the content's accuracy. So, what is information for? Not merely to mirror reality. Its role in human societies is to coordinate action, generate shared meaning, and secure group solidarity. The cost of being wrong, cognitively speaking, may be outweighed by the benefit of being together.

1.3. Social imagination

(From ritual to reality: The social roots of symbolic culture)

'There are things that count as real only because people agree to act as if they are'.

— John Searle, The Construction of Social Reality

'Symbolic culture depends not on tools or genes, but on the willingness to believe in shared fictions'.

— Chris Knight, Blood Relations

Symbolic culture

There is something strange about the world humans live in. It is filled with things that do not exist in any material sense—like promises, taboos, weddings, and gods—but still carry immense weight. People are willing to die for flags, feel ashamed over invisible rules, and structure their entire lives around stories that only exist because everyone agrees to treat them as real. In 'Language and Symbolic Culture: An Outcome of Hunter-Gatherer Reverse

Dominance[93]', Chris Knight explores how this peculiar symbolic world emerged, and how language became its main vehicle. At the centre of Knight's argument is a fundamental question: How did humans come to live in a shared imagined reality? Unlike brute facts—like gravity or fire—that are true regardless of belief, symbolic facts only exist because people agree on them. Money has value because people act as if it does. A wedding vow matters because others recognise its authority. Language is one of the most powerful tools for holding these agreements together. Knight draws on a wide range of archaeological and anthropological sources to show that symbolic culture did not appear suddenly 50,000 years ago, as some older theories claimed. Instead, it emerged gradually, with signs of symbolic behaviour—like the use of red ochre or beadwork—appearing as far back as 164,000 years ago in Africa. These early signs suggest people were already decorating themselves, engaging in rituals, and marking social roles through shared symbols, long before they migrated out of the continent. But how did this shared fiction become reliable? The answer lies in trust. Language is cheap—it costs little to say something—but trust is expensive. That is where rituals come in. Painful initiations, collective ceremonies, and costly displays of commitment helped establish strong bonds. Once trust was secured through these 'expensive' behaviours, the door opened for 'cheap' symbolic communication—like language—to function effectively. Knight connects this to what he calls reverse dominance. In early egalitarian hunter-gatherer groups, power was deliberately flattened. Dominant individuals were checked by coalitions, ensuring no single person could monopolise authority. Within this flat social structure, symbolic systems flourished—not despite the lack of hierarchy, but because of it. Everyone had to agree on the rules, which gave collective fictions their power. One of the most compelling parts of Knight's argument is the role of women. Drawing on Camilla Power's Female Cosmetic Coalition theory, he suggests that early female alliances—using body paint, ritual, and sexual signalling—played a key role in shaping symbolic behaviour. By concealing ovulation and synchronising menstrual cycles, women created collective rituals that disrupted male dominance and encouraged cooperative behaviour. These symbolic practices were not just decoration—they were strategic social tools. Language, in this light, was not simply a tool for expressing thought. It was born from the need to coordinate, to share fictions, and to live together in imagined orders. The symbolic world people inhabit today—with its laws, religions, and languages—is not a glitch in evolution. It is the outcome of deep social negotiation, where stories became real through collective belief.

Morality and intersubjectivity

What makes people not only live together, but care about each other, share values, and pass meaning from one generation to the next? In 'The Co-Evolution of Human Intersubjectivity, Morality, and Language[94]', Jordan Zlatev offers a powerful answer: humans did not evolve language first and morality later. Instead, the two—alongside deep emotional resonance between individuals—grew together, each shaping the other. At the heart of Zlatev's work is the idea that language is not just a code for sending information. It is a cooperative tool, and like any tool, it only works when people trust each other enough to use it. That trust, that sense of shared experience—what he calls 'intersubjectivity'—had to evolve before complex language could emerge. Without it, the words would fall flat. Humans, unlike their primate cousins, do not just react to one another. They share intentions, coordinate goals, and build collective meaning. Apes can be empathetic, sure, but their cooperation tends to be momentary

[93] Knight, C. (2023).Language and Symbolic Culture: An Outcome of Hunter-Gatherer Reverse Dominance. Oxford: Oxford University Press.
[94] Zlatev, J. (2023).The Co-Evolution of Human Intersubjectivity, Morality, and Language. Oxford: Oxford University Press.

and competitive. They do not follow shared rules or enforce social norms the way even young children do. That leap—from short-term cooperation to moral communities—was massive. And it did not happen through genes alone. Zlatev challenges the view that evolution is all about individuals passing on their DNA. He draws on 'multi-level selection' theory—the idea that evolution happens not just through individual competition, but through group cooperation. Groups that worked well together outlasted those that did not. This is where morality and language begin to make sense. Morality helps regulate the group. Language makes it possible to talk about what matters. To understand how this all began, Zlatev walks us through four major theories of human social evolution. Robin Dunbar saw language as a substitute for grooming—a way to bond with more people more efficiently. Terrence Deacon thought language and morality started as social contracts to regulate sex and food sharing. Michael Tomasello emphasised joint attention and collaboration, while Sarah Hrdy focused on 'alloparenting'—when people other than mothers help raise children. For Hrdy, this shared care was the true beginning of human empathy. Each theory gives a different angle, but together they sketch a story of how humans became the species that could look one another in the eye and say, 'we're in this together'. From shared caregiving, to joint attention, to the enforcement of norms, to the invention of symbolic systems—this is the chain that leads to language as we know it. Zlatev's most powerful insight may be this: the systems that make language and morality possible are fragile. If people stop raising children together, if society fragments into isolated individuals, those systems do not just weaken—they can disappear. Just like a fish in a cave loses its eyes when there is nothing left to see, humans risk losing the very qualities that made language—and moral life—possible in the first place.

Memory and imagination

In 'Memory, Imagination, and the Evolution of Modern Language[95]' Simona Ginsburg and Eva Jablonka argue that the roots of human language extend well beyond the mere transmission of facts, emerging instead from complex interactions between memory, imagination, and evolving cognitive capacities. What makes language unique is not just its capacity to communicate—it is how deeply it entangles memory, imagination, and play. In early human communities, the ability to recall past events, imagine new ones, and share them with others did not evolve in isolation. These faculties grew together, shaping one another into the rich, symbolic communication we now recognise as language. Long before writing or even structured grammar, early 'Homo' species already displayed signs of complex behaviour. They built tools, controlled fire, and lived in cooperative social groups. Such tasks demanded more than instinct—they required memory strong enough to store past events and imagination flexible enough to rehearse what might come next. This imaginative recall, made communicable through vocal sounds and gestures, gave rise to what could be called a proto-language: a system of signs capable of guiding others' attention not just to the present, but to remembered or imagined experiences. Language, in this view, became a kind of 'imagination-sharing' device. Unlike animals whose signals mostly refer to immediate situations—danger here, food there—humans developed the cognitive infrastructure to use words for absent things, for episodes long past, or plans not yet real. This required two types of memory: semantic memory (shared knowledge, like word meanings) and episodic memory (the personal recall of lived events). These forms of memory became entwined with language, allowing humans to speak of the past, predict outcomes, and create fiction. One of the main training grounds for this imaginative

[95] Ginsburg, S. and Jablonka, E. (2022).Memory, Imagination, and the Evolution of Modern Language. Cambridge: MIT Press.

capacity was play. Human childhood, unusually long compared to other species, offers space for pretend scenarios where children rehearse social roles, symbolic ideas, and linguistic patterns. A stick becomes a sword, a word like 'mine' marks territory, and a story becomes a shared world. Pretend play teaches children not only to use language, but to understand its power to shape reality in the minds of others. Crucially, memory and imagination are not perfectly accurate. They are flexible, constructive processes. That flexibility is a strength—it lets people piece together fragments, infer motives, invent solutions—but it also introduces confusion. Children often mix up what they experienced with what they were told. This 'source amnesia' shows how closely memory and language are intertwined: stories become personal memories, and imagined events take on the texture of lives lived. Over time, such cognitive blurring likely gave rise to new social tools: autobiographical memory, narrative identity, and the cultural transmission of values through myth and storytelling. Thus, language did not emerge out of thin air, nor as a singular adaptation. It arose from a deep interweaving of memory, imagination, and play—woven through generations of cooperative caregiving, social learning, and childhood exploration. In telling stories, humans do not just pass information; they pass worlds. And in those shared imagined worlds, language found its most fertile soil.

Mental travels

The power to speak about things not here, not now, maybe not even real—this ability defines human language. What makes it possible is something deeper than vocabulary or grammar: a mental faculty called 'mental time travel'. Michael C. Corballis, in 'Mental Travels and the Cognitive Basis of Language[96]', explores how this capacity to mentally revisit the past, imagine the future, or construct fiction helped lay the groundwork for language itself. Think of language as more than a tool—it is a bridge between minds, stretching across space and time. People do not just describe what they see; they tell stories, make promises, warn of dangers yet to come, and explain how things used to be. This all relies on being able to hold an image of something that is not right in front of you, and to trust that someone else can do the same. Mental time travel, though often thought uniquely human, seems to have faint traces in other animals. Corvids remember where they have hidden food and when it will spoil. Chimps can prepare tools for future use. Rats in mazes show neural activity that mimics routes they have taken—or might take. These behaviours suggest evolution did not hand humans a brand-new mind but rather stretched and reshaped an older one. At the centre of all this is the hippocampus—a structure involved in memory and imagination. In humans, it is active when reliving a memory or inventing a new story. In rats, it fires in patterns that suggest they are running through past or future paths. The architecture of memory and simulation is shared across species, but humans seem to have taken it further, building from it a world of language, culture, and meaning. Language did not just appear—it likely co-evolved with this mental wandering. As humans began to live in larger groups, plan farther ahead, and rely more on cooperation, the need to share not just facts but scenarios became essential. You cannot hunt mammoths or survive a winter migration without coordinating plans that do not yet exist. And once that need appeared, language had room to grow. The development of the theory of mind—realising that others have thoughts, beliefs, and knowledge—also played a role. If you can guess what someone else is thinking, you can tailor what you say. You can lie, persuade, or teach. This recursive awareness—'I know that you know that I know'—is a cornerstone of meaningful language. All this likely crystallised during the Pleistocene. As tools became more complex and

[96] Corballis, M. C. (2020) 'Mental Travels and the Cognitive Basis of Language', in Arbib, M. A. (ed.).How the Brain Got Language: Towards a New Road Map. Amsterdam: John Benjamins.

social bonds more vital, mental time travel and language pushed each other forward. Language gave thought shape. Thought gave language purpose. What makes language so powerful is not just that it helps humans survive—it is that it lets them share worlds that have not happened yet. The past, the future, even fiction—all become real in conversation.

How did trusted talk began?

Before words became a bridge between minds, communication was a simpler matter—instinct, reaction, survival. In 'The Origins of Language: A Slim Guide[97]', James R. Hurford traces how humans moved from unspoken gestures and animal cries to shared meanings and spoken trust. The key difference lies not in the sounds made, but in the intentions behind them. Human language did not evolve merely to alert or react—it evolved to mean, and to be trusted. Among animals, many signals are automatic. A growl warns, a posture threatens, a call might point out danger. These behaviours are functional but shallow. They do not presume much about what the listener understands or intends. What makes human language different is its reliance on 'intentionality'—both in producing and interpreting meaning. One does not just say something; one says it 'to' someone, 'for' a reason. And the other person must recognise not only the message but the purpose behind it. Hurford makes a critical distinction between 'dyadic' and 'triadic' communication. The former is a basic two-way interaction—something like 'I'm here' or 'Come closer'. Triadic communication, by contrast, introduces a third element: shared attention toward an object or idea. Think of pointing at the sky and saying, 'Look, a plane'. The speaker, listener, and thing all link together in one communicative act. That triangle is a cornerstone of human language. But for such signalling to take hold in a species, something else was needed: 'trust'. Animal communication is often shaped by competition. A monkey's alarm call may help its peers—but it might also mislead them. Among humans, language depends on a delicate balance of honesty and scepticism. If speech were mostly lies, it would fail. If it were only truth, it would be exploited. What evolved, then, is not just language, but a 'social system' capable of tolerating and correcting its own misuse. Hurford also emphasises that early language likely began with shared rituals—small, repeated actions that, over time, became signals. A child reaching up to be picked up may have started as a reflex but quickly turned into a conventional request. These rituals, rooted in physical interaction, gradually turned into abstract gestures, and eventually into spoken words. Language grew not from grammar books, but from lived interactions. Chimps and other primates show glimmers of these skills—especially in competitive settings—but they do not match the human ability to share knowledge cooperatively. Even a simple pointing gesture, which toddlers grasp with ease, tends to confuse chimps. That gap marks the boundary between instinctive reaction and conscious communication. Language is built on layers: action, intention, cooperation, and belief. It works because people believe each other, at least most of the time. Hurford's point is subtle but profound—talk only works when people agree, silently, that words mean something, and that meaning matters.

Origins of meaning

Long before humans ever spoke a word, there was already something in place that we might call meaning—not in language, but in the mind. In 'The Origins of Meaning[98]', James R. Hurford invites us to consider how animals, too, possess internal models of the world that reflect a kind of proto-semantics. Meaning, in this view, emerges not from language itself but from

[97] Hurford, J.R. (2014).The Origins of Language: A Slim Guide. Oxford: Oxford University Press.
[98] Hurford, J.R. (2007). The Origins of Meaning. Oxford University Press.

our evolutionary inheritance as creatures capable of recognising, categorising, and responding to their environments in purposeful ways. Hurford begins by distinguishing between two traditional linguistic domains: semantics, the relationship between expressions and the world, and pragmatics, which deals with speakers, listeners, and context. Yet these are later developments. To uncover the true roots of meaning, one must go further back—to a time before words, where meaning was grounded in perception and action. Animals, for example, may not use language, but they form representations of objects and events. A bird remembers where it stored food. A cat crouches before it pounces. These actions reflect internal states that track reality in useful ways. Such pre-linguistic cognition involves what philosophers call 'intentionality': the aboutness of mental states. It allows for beliefs and desires, even in species without speech. Hurford emphasises that these internal states can be true or false, successful, or not, depending on whether they match the external world. This form of meaning—rooted in perception and behaviour—is not yet language, but it is the soil from which language grows. The question of whether animals have concepts remains controversial. Some thinkers argue that language is required for genuine conceptual thought. Others, like Hurford, point to evidence of 'proto concepts' in animal behaviour. For instance, when a primate distinguishes between types of food or recognises individual group members, it reveals a capacity to generalise from experience. These concepts may lack the abstract complexity of human thought, but they are functional and adaptive. Hurford proposes a scale of cognitive complexity. At one end are basic reflexes—automatic, unthinking reactions. At the other are rich human concepts, shaped by introspection and symbolic reasoning. In between lie animal representations: systematic, situation-sensitive, and deeply shaped by evolutionary pressures. These mental models are not linguistic, but they form the cognitive scaffolding that made language possible. Importantly, Hurford does not claim that language simply appeared from nowhere. Instead, he describes a gradual transformation. As hominins evolved, they began to share their internal representations—at first through gestures or vocalisations, and later through structured language. Meaning, once confined to the individual mind, became a tool for cooperation and cultural transmission. In this way, language extended the reach of meaning, making it social, flexible, and cumulative. Meaning came first. Language did not create it; it captured it, shaped it, and finally allowed it to be shared. Before there were words, there were minds. And in those minds, the origins of meaning had already begun to form.

Beyond human nature

In 'Beyond Human Nature: How Culture and Experience Shape the Human Mind[99]' (2012), Jesse J. Prinz highlights the striking diversity of human behaviour and thought, arguing that culture and experience—rather than biology alone—play a central role in shaping the human mind. For decades, many psychologists and linguists assumed that what made humans human was mostly genetic. Traits were said to be 'hardwired' or 'innate'. From moral instincts to gender roles to intelligence, the dominant story was one of evolutionary inheritance. Yet the more researchers studied people outside of elite Western institutions, the more anomalies they found. In some parts of the world, eye contact is a sign of respect; elsewhere, it is rude. Ideas about fairness, beauty, punishment, and even love vary widely—not randomly, but in ways that reflect collective history, ecology, and habit. The mind, it turns out, is shaped not just by genes, but by geography. Cognitive science, once dismissive of cultural differences, is catching up. The view that humans come equipped with a fixed set of mental modules is giving way to a

[99] Prinz, J. J. (2012). Beyond Human Nature: How Culture and Experience Shape the Human Mind. London: Penguin.

more flexible image. Language, for instance, was long considered an instinct—a universal grammar pre-installed in the brain, waiting to unfold like a flower. But newer research suggests otherwise. Children learn language through pattern recognition, statistical learning, and social interaction. There is no need to posit a built-in grammar; general intelligence, paired with exposure, does the job. The same shift applies to morality. Emotions like guilt and shame do not emerge in a vacuum. They are trained into people through stories, correction, ritual, and repetition. Of course, none of this denies biology's role. People are not blank slates. But what is remarkable is not how little people change, but how much they do. College can raise IQ scores. Musical training can reshape auditory cortex. In short, culture does not just paint on top of biology—it rewires it. And that rewiring happens faster than evolution. Societies shift. Norms evolve. The rise of literacy, the invention of the internet, the transformation of economies—these changes have done more to reshape how people think and live than any gene ever could. Culture is humanity's real inheritance. It is messy, adaptive, full of contradiction—but it is ours. This matters for more than just intellectual curiosity. If we believe that traits are fixed by biology, we are more likely to accept inequality as natural, to stigmatise difference, or to treat people as unchangeable. But if behaviour and belief are shaped by culture, then change is not only possible—it is constant. People can be taught, societies can reform, norms can shift. Seeing humanity as shaped by nurture opens a door to moral and political transformation. To go 'beyond human nature', then, is not to deny nature—it is to recognise that what is most natural in people is their capacity to adapt. What makes a human mind is not its resemblance to a machine or a chimpanzee, but its openness to experience, its unfinishedness. Culture is not an overlay on biology—it is the context in which human minds are made. And that may be the most hopeful truth of all.

Language as showing off

Talking is not just about exchanging information—it is about standing out. In everyday conversation, people constantly signal competence, intelligence, and social value. Language, in this view, becomes less about transmitting facts and more about performing relevance. Jean-Louis Dessalles explores this in 'Why We Talk: The Evolutionary Origins of Language[100]' arguing that speech evolved as a subtle but powerful tool for navigating social hierarchies and building alliances. In group life, alliances are everything. Who you trust, who trusts you, and how well you are perceived all impact your survival and influence. Dessalles proposes that language developed as a strategy to win status by appearing useful—especially by providing relevant, biologically significant information. The person who spots danger first, remembers where food is, or offers sharp observations becomes someone others want to keep around. But status comes at a cost. Once someone shows they are consistently valuable, they can demand better treatment from the group. Coalitions have to offer recognition or risk losing that person to a competing group. This give-and-take—between being useful and being rewarded—is what stabilises social hierarchies. Language lets people 'audition' for these roles constantly, using words instead of weapons or displays of strength. Even the most casual remarks carry this undercurrent. Talking about the weather, for instance, is not always about the weather. It is a low-risk way to remain socially visible, to show one is engaged and tuned in. But when the conversation becomes more substantial—when someone shares a sharp insight, a funny observation, or a timely warning—that's when social value is clearly displayed. These moments build prestige, even if unconsciously. Unlike advertising, which relies on volume and repetition,

[100] Dessalles, J.-L. (2007). Why We Talk: The Evolutionary Origins of Language. Oxford University Press.

language is constrained by relevance. You cannot just brag endlessly—listeners tune out or push back. In conversation, status is earned only if you follow the unspoken rules: be relevant, make sense, do not lie, and say something worth hearing. The social group acts like a live fact-checker, constantly judging who is valuable and who is just noise. Dessalles goes further, suggesting that this instinct to communicate is not just cultural—it is biological. Humans are wired for conversation in the same way birds are wired for song. The drive to speak, to be heard, to make a point—it is automatic. We do not just want to connect. We want to impress, to prove we are worth aligning with. This instinct shaped the evolution of language. Before humans could structure full arguments or use abstract syntax, they were already using signs and sounds to draw attention and establish credibility. Language became the mirror of our social brain—designed not for neutrality, but for persuasion. In the end, human speech is a kind of constant campaign. People are not just talking. They are positioning. They are showcasing relevance, hoping to attract allies, admiration, and trust. Language did not evolve to make life easier. It evolved to help people win the ongoing, quiet competition of social life.

Improvising language

In 'The Language Game: How Improvisation Created Language and Changed the World[101]', Morten H. Christiansen and Nick Chater propose a radical rethinking of language. They argue that language did not arise from structured design or fixed rules, but from spontaneous, moment-to-moment improvisation. Like a game of charades, communication is an act of creativity and responsiveness, shaped by the practical demands of context and interaction. Language, they suggest, emerged not through evolutionary hardwiring for grammar, but as a social tool that people gradually refined. Early humans did not invent language all at once. Instead, they made do with what they had—gestures, sounds, facial expressions—until over time, these improvised exchanges stabilised into conventional patterns. Every linguistic system we know today is the product of this long, collaborative evolution. Rather than memorising abstract rules, people learn language by participating. Much like joining a game mid-play, one catches on by observing patterns and trying things out. Children do this effortlessly, not by learning definitions or syntax, but by absorbing patterns through use. This view challenges the long-standing belief that language is based on rigid systems of grammar and meaning. Instead, what feels like structure emerges from repetition, shared understanding, and adaptation. The authors illustrate this with examples like how a word such as 'hammer' can mean different things depending on context—whether requesting a tool, warning of danger, or remembering a past event. This flexibility shows that meaning is shaped less by fixed definitions and more by use within specific situations. Language, then, is not a polished system but a dynamic, ongoing game. Each exchange adds to its complexity, and every speaker helps shape it. It evolves not from perfection but from continuous approximation, from countless human attempts to make themselves understood. By viewing language as a creative improvisation rather than a coded system, Christiansen and Chater offer a refreshing lens on how humans came to speak—and why language remains one of the most remarkable collective inventions of all time.

Music and language

Language and music, at first glance, may seem like distant cousins—one tied to meaning and syntax, the other to feeling and rhythm. But as Uwe Seifert argues in his study from

[101] Christiansen, M.H. and Chater, N. (2022).The Language Game: How Improvisation Created Language and Changed the World. London: Penguin.

'Bringing in Emotion: Relating the Evolution of Music-Readiness and Language-Readiness within Comparative Neuroprimatology[102]', the two may share deeper roots than previously assumed. His work builds on the idea that the origins of language cannot be understood without also looking at the emotional and social functions of sound, especially through the lens of rhythm. At the heart of Seifert's work is the proposal that music-readiness (MR) evolved alongside language-readiness (LR), not as its byproduct, but as an equally important route to human communication. His first hypothesis, the Rhythm-First theory, suggests that rhythm came before melody or tonality in evolution. Think of early humans stamping feet, clapping hands, or mimicking natural rhythms before they ever formed sentences. These actions were not just noise; they created a kind of pre-linguistic order, a foundation for social rituals and emotional coordination. The second idea Seifert offers is that both music and language emerged from our capacity to imitate and break down patterns. Complex imitation—watching, copying, refining—allowed early humans to segment sounds into reusable units. This made not just speech, but music possible. Shared mechanisms in the brain, particularly those that process timing and sequence, were likely used in both systems. These were not separate evolutionary tracks but overlapping ones, shaped by similar pressures. But perhaps the most human part of this story lies in the third hypothesis: music's ability to bring people together emotionally. Long before language could clearly describe love, anger, or grief, rhythmic sound helped people feel coordinated. Music could calm, excite, or bond individuals in ways words could not. In group settings, synchronised movement—dancing, chanting, drumming—created emotional unity, turning a gathering of individuals into a community. From lullabies to war drums, music did not just express feeling—it created shared feeling. Seifert situates these ideas within the Mirror System Hypothesis, which suggests that our brain's ability to understand and replicate action is central to how both language and music formed. From a neural perspective, regions involved in rhythm and prosody (the melody of speech) are deeply entwined with those that process emotion and social interaction. This is especially true of Broca's area, known for its role in speech production but also active in musical and rhythmic tasks. What emerges is a picture where the evolution of language is not just about symbols and grammar, but about bodies in motion, emotions in sync, and rhythms that bound people together. Seifert's work invites a new perspective: that the roots of human speech lie not just in thinking, but in feeling—and that language was not only born of the brain, but also of the beat.

Communication of music

Music surrounds human life, yet its purpose is often misunderstood. It is not simply an emotional outlet or an aesthetic pleasure. According to Ian Cross in 'Music as a Communicative Medium[103]'(2022), music operates as a crucial communicative medium that evolved alongside language, not as its rival but as its complement. Music thrives in the spaces where language often falters—especially in moments of ambiguity, emotional complexity, or social tension. Language is excellent at delivering precise, propositional content. But sometimes precision can be a problem. In socially delicate moments—during mourning, negotiation, or rituals—the clarity of language can provoke rather than soothe. Music steps in where words fall short. It

[102] Seifert, U. (2020) 'Bringing in Emotion: Relating the Evolution of Music-Readiness and Language-Readiness within Comparative Neuroprimatology', in Arbib, M.A. (ed.) .How the Brain Got Language: Towards a New Road Map. Amsterdam: John Benjamins.

[103] Cross, I. (2009). Music as a communicative medium. [online] ResearchGate. Available at: https://www.researchgate.net/publication/237134673_Music_as_a_communicative_medium.

conveys affect, fosters connection, and allows people to coordinate and communicate without having to agree on specific meanings. One of music's defining traits is its ambiguity. It does not pin down a single message. Instead, it opens a shared emotional space where participants can align their internal states without needing identical thoughts or intentions. This broad interpretive scope enables music to manage relationships and emotions more gently and more inclusively than language can. Music also acts as an 'honest signal'. Its features—rhythm, pitch, dynamics—are tightly linked to bodily states. Faster tempos may suggest excitement or urgency, lower tones may suggest calm or seriousness. These associations mirror animal communication systems, where vocal signals often reveal internal conditions like size or aggression. In humans, music still carries these cues, which are interpreted across cultures despite differences in musical style. But music's meaning is not just biological. It is also deeply cultural. The way people respond to a melody, a rhythm, or a harmony depends on their history, habits, and shared practices. One can hear a lullaby and feel soothed without knowing the language, simply because of how the sounds are organised and the context in which they appear. Music speaks to humans because it resonates in both their bodies and their communities. Importantly, music does not operate in isolation. It relies on uniquely human traits—like shared intentionality, joint attention, and temporal entrainment. These are abilities that allow people to anticipate, respond to, and mirror one another's actions, often without conscious effort. When a group sings or claps together, they are not just performing—they are synchronising minds, bodies, and intentions. This makes music especially suited to social cohesion. It helps people move together, feel together, and belong together. Where language builds structure and order, music builds trust and unity. It is not less complex than language—just complex in different ways. In evolutionary terms, music likely emerged not for entertainment but for survival. It helped early humans navigate the uncertainties of social life, regulate emotions in groups, and reinforce bonds beyond words. Even today, its power lies not in what it says, but in how it brings people into shared feeling and presence.

2. EVOLUTION OF LANGUAGE

2.1. Evolution of speech

(Mechanics of evolution: The tapestry of life's change)

'Evolution has no foresight. It does not plan for the future. It is simply a process of cumulative change'.

— Richard Dawkins, The Blind Watchmaker

'The miracle is not that language evolved, but that it did so without design'.

— Steven Pinker, The Language Instinct

Language evolution

In their article 'Language Evolution as a Darwinian Process: Computational Studies[104]'(2007), Pierre-Yves Oudeyer and Frédéric Kaplan argue that the evolution of language, much like biological evolution, unfolds through processes of replication, variation, and selection. Rather than seeing language as a fixed system or a uniquely human invention outside the rules of nature, they frame it as an adaptive phenomenon shaped by dynamic pressures, trial-and-error, and population interactions. Their approach is computational, simulating how agents—without any preexisting language—gradually develop shared linguistic conventions over time. One of the central insights in their study is that linguistic elements like words or phonemes behave as 'replicators'. These are units that, through imitation, get passed from one mind to another, not unlike how genes are inherited in biology. Just as DNA mutates and adapts to fit changing environments, linguistic replicators evolve to meet cognitive and communicative needs. The process is not perfect; each transmission can introduce small errors or shifts, which, over time, accumulate and generate linguistic diversity. Oudeyer and Kaplan simulate different replication models to see how agents develop consensus. Some agents merely repeat the last word they heard for a particular object; others rely on the most frequently used word. Over time, these subtle differences lead to significant changes in how quickly and efficiently language stabilises. The conclusion is clear: the way information is replicated matters just as much as what is being communicated. The simulations also show that noise—random variations in transmission—can drive language change without any functional purpose, through what is known as 'neutral drift'. These small, functionally meaningless changes can, over generations, alter the structure of a language, mirroring biological evolution where non-beneficial mutations sometimes persist simply by chance. This randomness accounts for why languages diverge and transform even when communication needs remain constant. Crucially, the evolution of language is not only about the external world—it is also about the minds using it. Language must conform to the constraints of cognition. Agents are better at learning and reproducing linguistic forms that are closer to what they already know or can physically produce. For example, agents who babble syllables that resemble human speech naturally converge on sound systems more efficient and learnable than random noise. This adaptation to internal limits is what makes language such a tightly tuned cultural artefact. What Oudeyer and Kaplan ultimately show is that language does not evolve according to a central design or universal blueprint. It evolves locally, socially, and adaptively. Through countless iterations and interactions, linguistic forms emerge that are not only functional but also flexible enough to persist, spread, and transform across generations. This Darwinian perspective does not reduce language to genes or codes—it illuminates how it thrives as a living, evolving system embedded in social minds.

Ecology of language evolution

In 'The Ecology of Language Evolution[105]', Salikoko Mufwene offers a rich, interdisciplinary framework for understanding how languages change, thrive, or die. He draws parallels between language and biological species—not because languages are living organisms, but because they exhibit patterns of variation and adaptation within social and environmental contexts. The key insight of Mufwene's work is that language evolution is best

[104] Oudeyer, P.-Y. and Kaplan, F. (2007). Language evolution as a Darwinian process: computational studies. Cognitive Processing, 8(1), pp.21–35. doi:https://doi.org/10.1007/s10339-006-0158-3.

[105] Mufwene, S. (2001). The Ecology of Language Evolution. Cambridge University Press.

understood through an ecological lens, where both internal structures and external pressures shape linguistic outcomes. Languages do not evolve in isolation; their fates are tied to their speakers, much like a parasite's survival depends on its host. From this perspective, individual speakers—each with their own idiolect—serve as agents of change. As these idiolects interact in a community, certain linguistic features become more common, spreading through usage and social reinforcement. Variation, not uniformity, is the engine of change. Just as in biology, the presence of diversity within a population enables adaptation and innovation. Mufwene emphasises that evolution does not imply progress. A language can become more complex or more simplified, depending on the ecological pressures it faces. These pressures include migration, conquest, economic systems, educational policies, and inter-language contact. In colonised regions, for example, African and indigenous languages were often subordinated to European ones. This unequal power dynamic led to language shift, creolisation, and even language death—not because the colonised languages were less 'fit', but because the social ecology favoured others. From an ethnographic perspective, language ecology refers to the social environment in which language operates—factors like multilingualism, social prestige, and economic opportunity all influence which varieties are preserved or transformed. From a macroecological standpoint, it encompasses broader forces such as population density, institutional support, and geographic dispersion. Both views reveal that linguistic evolution happens not through isolated acts of innovation but through collective adaptations to dynamic surroundings. One of Mufwene's most striking ideas is to treat languages as species rather than organisms. This shift allows for a focus on populations, variation, and competition—key principles in both evolutionary biology and sociolinguistics. Like species, languages speciate: they diversify, split, or merge based on changing conditions. Yet they also hybridise, borrowing features across boundaries when speakers come into contact. This is how new creoles, pidgins, and dialects emerge—not from deliberate invention, but from interaction under pressure. The structural perspective of language ecology explores how different components—sound systems, syntax, morphology—interact. Change in one domain can ripple across the system, just as in ecosystems, where a shift in one species alters the balance for others. Language is not a closed system but a constantly adapting, nonlinear network of signs, shaped both by its internal logic and the external realities of human life. Ultimately, Mufwene's ecological approach reframes language not as a static object of study but as a process: contingent, variable, and deeply embedded in human history.

A Darwinian process

In 'Language Evolution: A Darwinian Process[106]', Bernard H. Bichakjian offers a compelling case for understanding language change through the lens of biological evolution. Unlike the common assumption that language belongs solely to the realm of culture or the mind, Bichakjian argues that linguistic development is grounded in the same evolutionary principles that govern biological traits. He questions the outdated dichotomy between body and mind that has dominated linguistics, emphasising that language, like any human faculty, is shaped by genetic, cognitive, and social pressures acting over time. From this perspective, language does not evolve randomly or through cultural whims alone. Just as physical traits are subject to variation, selection, and adaptation, so too are linguistic features. The article traces the intellectual lineage of this idea, beginning with early 19th-century thinkers like Schlegel and Schleicher. Schleicher, though influenced by Darwin, misunderstood the implications of natural

[106] Bichakjian, B.H. (2007) 'Language Evolution: A Darwinian Process', Theoria et Historia Scientiarum, 11(1): 25–45.

selection by labelling linguistic simplification as a kind of 'decay', failing to see how efficiency might be a selective advantage. Later linguists like Sapir and Jespersen offered glimpses of a more dynamic understanding—suggesting that languages 'drift' or move toward greater communicative clarity—but their insights were largely overshadowed by structuralist models that froze language into static systems. The turn toward Saussurean structuralism redirected the discipline toward the synchronic study of language systems, sidelining evolutionary inquiry. For Bichakjian, this was a detour. He argues that any theory of language must integrate diachronic development and be rooted in the biological capacities of its users. Drawing from the concept of neoteny in evolutionary biology—the preservation of juvenile traits into adulthood—he suggests that human language evolved by favouring traits acquired earlier in development, such as simplified morphology or more fixed syntax. These traits offer cognitive advantages and are easier to learn and use, giving them an edge in the evolutionary process. Using the Indo-European language family as a case study, Bichakjian outlines how over millennia, complex inflectional systems gave way to simpler, more transparent grammatical constructions. These shifts did not reflect loss or decay but adaptation: systems streamlined for learning and social communication. The rise of auxiliary verbs, fixed word order, and analytic structures over synthetic ones are all signs of this selective pressure in action. Crucially, Bichakjian acknowledges that external forces like language contact or social upheaval also influence linguistic change. However, these do not undermine the evolutionary model. Much like hybridisation in biology, cultural interference introduces variation, but the underlying selective processes still determine which features persist. Ultimately, Bichakjian's view reframes language not as a cultural anomaly but as a biological and cognitive tool shaped by evolutionary pressures. Language evolves not to be perfect or pure, but to be used—efficiently, flexibly, and communicatively—by human beings across time and place.

Evolution, adaptation, and change

In his book 'Language Evolution, Acquisition, Adaptation, and Change[107]', Luke Strongman explores the complex and intertwined processes that shape language over time, framing it as both a biological and cultural phenomenon. Languages today number between 6000 and 8000, but many are on the verge of extinction, while a few dominant ones expand across continents. Strongman emphasises that language does not remain static—it constantly evolves, shifts, and adapts to the sociocultural and cognitive environments of its speakers. This evolution, he argues, mirrors the dynamics of living systems, where adaptation, competition, and environmental pressures shape survival and form. Human language, he writes, likely emerged from a mix of gestures, vocalisations, and perhaps even song, gradually coalescing into structured systems over the last 200,000 years. The debate between innate structures and learnt behaviour remains central, but most researchers now agree that three adaptive systems underlie language: biological evolution, individual learning, and cultural transmission. Strongman points out that language is not simply passed down genetically but also through dynamic social interactions—what a person learns and how they use language depends on the society they are part of, and how that society values and uses different linguistic forms. Universal Grammar, proposed by Noam Chomsky, suggests that humans are born with an innate capacity for language. Strongman considers this theory, noting that our ability to learn language so effortlessly, even with limited exposure, indicates deep biological roots. But this capacity does not function in isolation; it is constantly shaped by communication contexts,

[107] Strongman, L. (2012) 'Language Evolution, Acquisition, Adaptation, and Change', in Language Evolution, Acquisition, Adaptation, and Change, Chapter 2. Inter-Disciplinary Press.

cognitive development, and even technological evolution. For instance, media forms—from oral storytelling to digital platforms—have influenced not only how language is transmitted but also how it is structured and perceived socially. Strongman draws on the distinction between the broader faculty of language shared with animals and the narrower faculty unique to humans—our recursive, conceptual, and intentional use of language. This recursion allows humans to embed ideas within ideas, a feature central to abstract thought and complex communication. Through this lens, language is not only about words but about the cognitive machinery behind them—how humans create, interpret, and manipulate meanings in increasingly subtle and layered ways. Language change, according to Strongman, is not just slow evolution—it can happen rapidly under certain conditions. Migration, shifting prestige, or media exposure can alter the way people speak within a generation. These shifts often reflect the adaptation of speakers to new environments—social, technological, or even emotional. Whether through dialects, new words, or altered syntax, language responds to the needs, constraints, and desires of its users. Ultimately, Strongman presents language as a living system—complex, responsive, and deeply human. Its evolution is driven not by a single force, but by the continuous interaction between our biology, our minds, and the social worlds we inhabit.

Evolution of communication

In 'The Evolution of Communication[108]', Marc D. Hauser explores how communication systems have evolved across species and why they take the specific forms they do. The central argument is that communication, though seemingly diverse in form—from birdsong to human speech—emerges from shared biological, environmental, and social pressures. Whether it is a flower signalling bees with colour or a lion coordinating with its pride during a hunt, all forms of communication are designed to solve adaptive problems. Their efficiency depends not just on what is conveyed, but on how the message is shaped by the cognitive and physiological limitations of both sender and receiver. Hauser approaches the evolution of communication through a comparative and evolutionary lens, drawing on the ethological framework proposed by Nikolaas Tinbergen. Tinbergen's four questions—concerning mechanism, development, function, and evolutionary history—serve as the book's foundation. This framework is crucial, Hauser argues, because it prevents any single perspective—be it linguistic, psychological, or biological—from dominating the conversation. Instead, it encourages a more integrated view that connects neurological mechanisms with ecological functions and phylogenetic roots. One key concept Hauser emphasises is that communication systems are not just passive reflections of cognitive capacity or environmental needs. They are shaped by interaction and design. Just as a traffic light is constrained by the limits of its technology and the expectations of its users, communication systems evolve to balance expressiveness with clarity, cost with efficiency. For example, the claws of marine shrimp signal territorial defence, but their effectiveness depends not only on the display's energy cost but also on the visual sensitivity of their rivals. The system works only if both sides are calibrated to the same channel of meaning. Hauser also highlights the importance of distinguishing between cues, signals, and signs. Cues are incidental features that convey information but aren't evolved for that purpose—like the size of an animal indicating strength. Signals, by contrast, are intentional and evolved for communication, such as a bird's mating call. Signs, like a trail of footprints, provide useful information without intent. Understanding this difference is essential to interpreting the evolutionary significance of behaviour. Through comparative studies across species—especially birds, amphibians, and

[108] Hauser, M. D. (1996) The Evolution of Communication, MIT Press.

primates—Hauser shows how signals evolve under pressures like predation, mating, and social cooperation. While birdsong and human language may seem unrelated, both depend on similar constraints of memory, perception, and learning. However, human language presents a special case. Though we understand its neurological and developmental basis well, we still lack a full account of its evolutionary function and origin. Hauser urges researchers to look beyond syntax and examine how language may have evolved in response to specific social and ecological challenges. 'The Evolution of Communication' invites readers to see language not as a singular leap in evolution, but as part of a broader continuum of communication across life forms.

Evolution of imagination

Language did not begin as a technical tool for labelling things in the world—it emerged from something deeper, older, and more embodied: the human imagination. Stephen Asma, in 'The Evolution of Imagination[109]', argues that before grammar or vocabulary, early humans were already crafting meaning through rhythmic gestures, emotional vocalisations, and social improvisation. These proto-narratives, rooted in ritual and play, provided the scaffolding for language to evolve not as cold transmission, but as a creative act. Improvisation was central to this transformation. Much like a jazz musician riffing over a melodic 'head', early humans spun spontaneous variations on familiar emotional themes. In this analogy, the 'head' is the melody—structured, repeatable, memorable—while improvisation adds novelty and personal resonance. The same duality exists in language: fixed words and syntax form the skeleton, but improvisation breathes life into meaning. Asma shows how even infants, through play and imitation, rehearse social scenarios long before they speak. These rehearsals, or simulations, formed a primitive kind of knowledge—one rooted in pattern, rhythm, and feeling. What makes imagination evolutionary is its capacity to simulate and sequence events internally. This simulation system enabled early humans to anticipate danger, test behaviours mentally, and rehearse group rituals. It operated in two modes: involuntary (dreams, mimicry, spontaneous gestures) and voluntary (deliberate planning, storytelling, symbolic invention). Language emerged from the fusion of these modes, not replacing imagination, but organising and amplifying it. Asma cautions against if early humans lacked complex cognition. The imaginative lives of Pleistocene humans may have been vivid, chaotic, even overwhelming—long before language formalised mental experience. With the rise of symbolic culture, imagination became self-directing. One could now create signs, store them, reflect on them, and even use them to simulate oneself. This shift made possible not just communication, but storytelling. Narrative, in this context, is not ornament—it is survival. Stories help communities navigate fear, bond emotionally, and transmit adaptive knowledge. Monsters in myth mirror real-world threats; gods encode morality. Fiction reveals emotional truth, even when it distorts factual reality. The strength of language lies not only in what it describes but in what it evokes. Meaning becomes real through resonance. Asma's view reframes language as a system for instructing imagination. A well-told story is not just heard—it is lived internally, felt in the body. The improvising imagination, rooted in both 'hot' (emotional, spontaneous) and 'cold' (deliberate, strategic) cognition, becomes the central force behind language evolution. In this way, imagination does not serve language—language serves imagination. And it is through improvisation that humans became not just speakers, but meaning-makers, myth-builders, and co-authors of reality.

[109]Asma, S. (2017) The Evolution of Imagination, University of Chicago Press.

Cultural evolution

In 'The Emotional Mind: The Affective Roots of Culture and Cognition[110]', Stephen T. Asma and Rami Gabriel argue that human culture is not shaped solely by reason or utility but is fundamentally driven by emotional systems inherited from our evolutionary past. These affective systems—such as care, fear, pride, shame, and awe—form the underlying architecture for behaviours that structure societies, from gift-giving and cooperation to ritual, morality, and spirituality. Unlike standard models of cultural evolution that rely on rational decision-making or genetic fitness, Asma and Gabriel suggest that cultural norms develop from emotional regulation. Rituals, for example, are not just symbolic acts but tools for affect management. They help individuals navigate powerful emotions and facilitate social coordination, especially in larger groups. Emotional responses like trust and respect drive gift-giving practices and reciprocity, reinforcing bonds within families and broader kin networks. As societies expand, these systems are extended and abstracted into ideologies, contracts, and institutions, but their emotional roots remain intact. The authors highlight how hierarchy and dominance, central to social organisation, also emerge from affective dynamics. In early human groups, like the !Kung, leadership was situational and consensual, based on trust and emotional reputation rather than coercive power. As populations grew, dominance hierarchies became more formalised, supported by ceremonial displays and social rituals. Emotions such as honour, envy, and pride played a central role in stabilising these hierarchies. Observers within the group would monitor and internalise emotional signals, gradually cementing social roles through repeated affective interactions. Cooperation, another key to social evolution, is likewise rooted in affect rather than calculation. People reciprocate favours not merely for future gain, but because emotions like gratitude and guilt create a powerful inner compulsion to respond. These mechanisms of moral sentiment—first observed by Darwin—develop into shared social norms and ethical systems. Even behaviours that seem to contradict individual self-interest, such as punishing unfairness in economic games, are guided by emotional reactions to perceived injustice. The book also explores the affective roots of religion and art. Emotions like awe, wonder, and transcendence are central to spiritual experience. Through ritual, myth, and artistic expression, societies channel these emotions into communal forms of meaning. Cave paintings, shamanic practices, and sacred ceremonies all reflect an attempt to communicate emotionally intense experiences. These affective practices are not decorative; they are central to how societies organise belief, pass down knowledge, and reinforce cohesion. Ultimately, Asma and Gabriel propose that the evolution of culture is best understood as the domestication and elaboration of emotional systems. Human social life, in all its complexity, remains grounded in the primal emotional circuits that shaped the earliest forms of bonding, conflict, and communication.

Language adapts to the brain

In their chapter 'A Solution to the Logical Problem of Language Evolution: Language as an Adaptation to the Human Brain[111]', Nick Chater and Morten H. Christiansen offer a bold reversal of the traditional view that human brains are biologically hardwired for language. Against the dominant Chomskyan model of a genetically specified universal grammar (UG), they argue that it is not the brain that evolved to accommodate language, but language that

[110] Asma, S.T. and Gabriel, R. (2019). The Emotional Mind: The Affective Roots of Culture and Cognition. Harvard University Press.

[111] Chater, N. and Christiansen, M. H. (2011). A Solution to the Logical Problem of Language Evolution: Language as an Adaptation to the Human Brain. In M. Tallerman & K. R. Gibson (Eds.), The Oxford Handbook of Language Evolution. Oxford University Press.

evolved to fit the cognitive capacities of the brain. Rather than being a natural organ with genetically programmed rules, language is seen as a cultural construct that survives by conforming to human learning and processing constraints. The so-called 'logical problem of language evolution' arises from the idea that language—as described by UG—comprises intricate and arbitrary rules that must have emerged through natural selection. But language changes faster than genes can follow, and populations around the world speak vastly different languages. It seems implausible that natural selection could hardwire all the potential diversity into human DNA. This suggests that UG, as a biologically inherited system, is not evolutionarily viable. Instead of assuming the existence of a pre-built language organ, Chater and Christiansen propose that language behaves like other cultural phenomena—constantly evolving through use. As languages are transmitted from generation to generation, only the forms that align with general cognitive constraints survive. These include memory limitations, preferences for certain word orders, and tendencies toward regularity. Over time, languages adapt to be easier to learn, process, and use within communities. This explains why certain structural patterns appear universally—not because they are innate, but because they are the most cognitively efficient. The authors emphasise that language structure is shaped by learning mechanisms already present in the brain—like the ability to process sequences, detect patterns, and assign meaning to sounds. Just as musical structures reflect the physiology of hearing and motor control, and tools mirror the constraints of the human hand, languages reflect the design of the mind. Cognitive biases shape how language sounds, how it is built, and how it changes. Compositional structures, pragmatic efficiency, and memory constraints all guide the emergence of grammatical systems without the need for genetic coding. This theory also avoids the difficulties of gene–language co-evolution. Since linguistic environments shift rapidly, there is no stable target for genetic adaptation. Human children can learn any language, not just those of their ancestors, suggesting that brains are not specifically tailored for individual languages but equipped with general learning abilities. In this view, language is not a biological miracle, nor the product of an arbitrary genetic leap. It is a cultural artefact that has evolved in step with cognition, shaped by the minds that use it. Language acquisition is not biological unfolding, but cumulative learning shaped by communication and the constraints of thought. It is not the mind that bends to language, but language that molds itself to the mind.

Wired for culture

In 'Wired for Culture: Origins of the Human Social Mind[112]', Mark Pagel argues that culture, rather than individual biological traits, is the defining feature of human success. The book outlines how, around 80,000 years ago, Homo sapiens took an evolutionary leap by embracing culture—not as high art or literature, but as the transmission of survival strategies through imitation, belief systems, and cooperation. This development was not gradual but sudden in evolutionary terms, marking a pivotal shift from genetic to cultural inheritance. For millions of years, our ancestors lived in small kin-based groups, relying on instinct and physical adaptation to survive. But with the emergence of symbolic communication, tool-sharing, and group rituals, humans began organising their lives around shared information rather than just inherited behaviour. This meant knowledge could travel from one mind to another, skipping the long generational delays of genetic change. The result was the emergence of tribes, languages, customs, and technologies that could adapt faster than any genome. Culture, Pagel argues, functions like a 'survival vehicle', allowing humans to occupy vastly different ecological niches—from the Arctic to tropical rainforests—without needing distinct biological

[112]Pagel, M. (2012). Wired for Culture: Origins of the Human Social Mind. Allen Lane.

adaptations. Just as birds develop different beak shapes to exploit different foods, human cultures evolve specialised knowledge systems to survive in their environments. And crucially, this adaptation happens through imitation, not mutation. Children absorb the habits, beliefs, and language of their groups effortlessly, creating continuity that bypasses biology. However, this cultural strategy comes with a cost: deep group loyalty. Because survival depends on being accepted by the tribe, culture wires individuals for intense in-group identification. People adopt the beliefs, norms, and prejudices of their community with near-automatic devotion. This helps cooperation, but also makes humans vulnerable to manipulation, groupthink, and intergroup conflict. Culture does not merely shape what people do—it forms what they believe is right, moral, and natural. The result is a species wired not for independent reason, but for loyalty to inherited traditions. From language to morality, Pagel shows that many things humans think of as 'rational' or 'personal' are products of cultural programming. Whether one values freedom, family honour, religious duty, or self-expression depends less on personal reasoning and more on the culture one grows up in. In this sense, culture becomes both a ladder to civilisation and a trap of tribalism. Pagel's insight reframes evolution as a two-tiered process: genetic change shaped our biology, but cultural evolution shaped our minds. And because culture spreads and changes faster than genes, it now plays the dominant role in shaping human destiny. The price of this adaptive flexibility, however, is ideological rigidity: humans may kill or sacrifice themselves not for genes, but for the stories and symbols their cultures have taught them to believe in. In the end, culture is what made humans powerful—but it also made them dangerous. It gave language, morality, art, and science, but also war, dogma, and inequality. To understand what it means to be human, Pagel insists, one must understand culture not as a decoration of life, but as its engine.

2.2. Rise and fall of language

(Rationality's arc: From logic to emotion)

'In an age of information, ignorance is a choice'.

— Donny Miller

'Public opinion, shaped by emotion rather than evidence, can become a force hostile to truth'.

— Hannah Arendt, Truth and Politics

Progress or Decay?

Language never stands still. As Jean Aitchison emphasises in 'Language Change: Progress or Decay?[113]', speech is subject to the same restless motion that shapes the physical and social world. From Heraclitus to Yeats, thinkers have echoed the truth that change governs all things. Language, embedded in this flow, evolves—sometimes subtly, sometimes drastically—alongside the humans who use it. The English of Chaucer is no longer ours, just as today's idioms will soon sound foreign. Aitchison opens with poetic reminders: Heraclitus's River of flux, Spenser's whirling wheel, and von Humboldt's insistence that language is a 'ceaseless flaming thought'. Even the simplest fourteenth-century verse, intended for 'symple men that strange Inglis cannot ken', now requires footnotes. As Chaucer noted, a thousand years renders familiar words odd and strange. Why would language alone escape the movement that transforms tadpoles into frogs or milk into cheese? Yet despite its inevitability, language change

[113] Aitchison, J. (2013) Language Change: Progress or Decay?, Routledge.

stirs resistance. Commentators often lament the loss of older forms, branding modern usage lazy or corrupt. From complaints about the death of the subjunctive to ridicule of phrases like 'between you and I', critics cast each deviation as decline. Aitchison counters that such views typically confuse personal preference with linguistic decay. Slang and variation may offend taste, but they follow patterns, and speakers unconsciously apply consistent rules even when breaking so-called norms. The heart of the debate lies in whether change is random or directed. Language, like fashion, shifts with time, but not without structure. Changes in pronunciation, grammar, and meaning tend to follow recurring paths—lenition of consonants, reanalysis of syntax, semantic drift. These processes may not aim toward improvement, but neither are they evidence of degeneration. What emerges is different, not worse. 'Language Change: Progress or Decay?' also explores one of the most fundamental engines of linguistic evolution: grammaticalisation. This process turns once-independent words into grammatical tools—particles, affixes, and eventually vanishing traces that structure speech more efficiently. John Horne Tooke famously called such changes the 'wheels of language', arguing that abbreviation enables thought to race ahead, carried by a more agile tongue. Over time, full words are emptied of meaning and bound into syntax, not as detritus, but as essential scaffolding. Grammaticalisation moves in layers. New forms arise while older ones persist, like geological strata that resist erasure. These changes follow patterns. Even word order can crystallise, as free arrangements yield to fixed sequences once grammatical markers fuse tightly to verbs. Idioms offer a glimpse into the endpoint of this process. These petrified phrases began as metaphors or casual collocations and were gradually absorbed into the grammar. Once independent, they now function as indivisible units of meaning. Grammaticalisation also blurs boundaries between syntax and discourse. They no longer describe, but shape conversation itself. As words shrink, fuse, and lose transparency, they become more efficient carriers of thought. This process may seem like decay—meaning disappearing, structures fossilising—but it is also a renewal. It is how language adapts to its own use, compressing expression to keep up with cognition. Grammaticalisation thus embodies the paradox of linguistic change: the more a word loses, the more the system gains. Aitchison concludes that language change, like biological evolution, is neither good nor bad. It is natural, persistent, and shaped by social, cognitive, and cultural pressures. Rather than fight this motion, one must understand its mechanisms. Progress or decay becomes a question of perspective, not of fact.

Development and Breakdown of Language

The idea that children, by learning imperfectly, push language forward—or backward—has fascinated scholars for over a century. At the same time, some have looked at speech disorders, slips of the tongue, or the effects of alcohol to understand whether language decay mimics its growth. In 'Language Change' Jean Aitchison urges caution. Neither child speech nor disordered communication offers a simple key to understanding how language changes. Instead, these phenomena offer clues—limited and scattered—about deeper patterns rooted in society and communication itself. Children are undeniably innovators. As early as the nineteenth century, linguists suggested that each new generation mishears and reinvents the language it inherits. This view gained traction again in the 1960s and ’70s, when researchers proposed that language evolves precisely because children subtly reinterpret what they hear. But later research complicated this picture. Eric Lenneberg’s 'critical period' hypothesis proposed a strict window in which humans can naturally acquire language, implying that only young learners reshape grammar. Yet studies of late learners, stroke survivors, and second-language acquisition showed a far more flexible model. Language learning slows with age, but it does not halt—and most speakers, not just children, bend rules in everyday use. Take irregular

verbs: children famously say comed and goed, echoing historical shifts that regularised past tense forms. But young speakers also do things not seen in real language change. For instance, they might drop tense markers entirely ('He melt' instead of 'He melted'), a simplification rarely seen beyond the nursery. Even features like double negatives emerge from mixing adult patterns, not from creating new syntax. Child speech does echo some natural phonetic processes—like simplifying consonant clusters (saying bup instead of bump). But again, this reflects articulatory immaturity more than a driver of change. In fact, most phonetic shifts among adults—such as vowel chain shifts—go in the opposite direction of childhood errors. Adult change stems from fluent, efficient use, not developmental limits. Beyond the cradle, speech also shifts across the lifespan. Very young children mimic nearby accents. School-age kids adopt their peers' slang. Teenagers often resist parental speech, carving out group identity through language. These trends—known as 'age-grading'—do shape certain vocabulary and pronunciation choices, but most fall away in adulthood. The truly lasting changes often happen through peer networks, not from toddlers' babbling. Could disordered or altered speech provide better insight? Slips of the tongue, drunken speech, and aphasia have all been studied. Slips are mostly accidental blends or transpositions—'wipser' instead of 'whisper', for instance. These rarely stick, unless picked up by influential figures or media. Drunken speech, too, reveals some relevant patterns: final stops tend to get devoiced, and articulation slows. But many features—like exaggerated consonant length—do not match historical change. Aphasia, meanwhile, offers even less guidance. Word-finding difficulties, telegraphic syntax, or prosody loss in brain-injured patients reflect neurological damage, not natural speech drift. They disrupt language, but do not redirect it. Ultimately, both children's mistakes and adult breakdowns expose where language is vulnerable—but they are not the main engines of its transformation. Language shifts when groups of speakers adjust to each other, seek new identities, or respond to new pressures. Children and pathology highlight flexibility; society drives evolution.

Deception, consciousness, and truth

In 'Wired for Culture: Origins of the Human Social Mind', Mark Pagel challenges the common assumption that human intelligence evolved primarily to perceive truth. Instead, he argues that our minds evolved to ensure survival and social success, even at the expense of accuracy. Truth, in this context, is secondary to persuasion, cohesion, and manipulation. As Robert Trivers observed, if deception is key to communication, then evolution must have also selected for self-deception—masking one's motives even from oneself to more convincingly manipulate others. This turns the classical view of rational cognition on its head: the human mind might not be an instrument of truth but an adaptive tool for survival through social navigation. Cognitive science supports this view by showing how memory and perception are deeply unreliable. People routinely fabricate or distort memories, often unconsciously, to protect their ego or preserve a coherent narrative. Recollections are less about objective truth and more about storytelling for identity maintenance. What one person remembers about a shared event may diverge radically from others' accounts. This is not mere error—it reflects an evolved strategy to manage social relationships and inner consistency. Pagel extends this argument by comparing the internal 'I' to a narrator created by genes for their own benefit. The 'self' may be less an agent than a useful illusion, shaped by conflicting genetic interests—maternal and paternal alleles vying subtly within our psychology. Our experience of volition, even morality, may be downstream of unconscious processes. In studies of decision-making, brain activity often precedes conscious awareness by several seconds, suggesting that decisions are made before we know we are making them. Consciousness may simply be the reporting mechanism, not the initiator. Deception, both of others and of oneself, plays a critical role in

this mental architecture. Social life demands cooperation, but too much honesty can be costly, while skilful dishonesty can be advantageous. Yet, widespread deception would destroy trust. This creates a tension between the need to deceive and the parallel need to detect deception—a cognitive arms race that likely drove much of our intelligence. Cases like that of Peter Bryan, who deceived professionals into believing he was stable before committing a horrific crime, illustrate how finely tuned this capacity can be. Our minds have evolved not only to read others but to conceal our own dangerous or strategic truths. But deception is only half the story. Imitation—social learning—is the other side. In dynamic environments, copying successful others often beats figuring things out from scratch. Alan Rogers and Kevin Laland showed that copying can outperform innovation, provided there are a few innovators to lead. Yet, this strategy is vulnerable when errors are copied too. Social learning makes knowledge cumulative but fragile. Pagel's work suggests that what feels like rational autonomy may instead be a system evolved for copying, concealing, and guessing. Consciousness, morality, and even identity emerge from a mind evolved not for truth but for strategic survival.

The rise and fall of rationality

In their compelling study 'The Rise and Fall of Rationality in Language[114]', Marten Scheffer, Ingrid van de Leemput, Els Weinans, and Johan Bollen explore how public language has transformed over the past 170 years, revealing a profound shift in the way people communicate and, by extension, think. Their research, based on an analysis of millions of digitised books, charts a trajectory from collective, logic-centred discourse toward a more personal, emotionally driven style of expression. Beginning around 1850, the study finds a steady rise in the frequency of words associated with rational thought—terms like 'conclusion', 'determine', and 'evidence'. At the same time, words rooted in personal feeling and belief—'feel', 'believe', 'hope'—gradually declined. This trend continued until about 1980, when the pattern reversed. Since then, particularly after the rise of social media around 2007, emotion-laden language has surged while fact-based vocabulary has waned. The shift is not confined to literature alone. Similar patterns are found in nonfiction, news articles from *The New York Times*, and even Google search behaviour. The authors identify two opposing language poles: one tied to society—rationality, institutions, science—and the other to the personal—intuition, emotion, spirituality. These align with psychological models of human cognition that distinguish between fast, instinctive thinking and slower, deliberative reasoning. Their analysis suggests that language has become increasingly aligned with the former. To illustrate this change, the authors performed principal component analysis on the 5,000 most frequent English and Spanish words. One component revealed a clear 'tilted hockey stick' pattern: rational terms gradually increasing until 1980, then plummeting as emotional terms surged. The data also show a shift from plural to singular pronouns, reflecting a move from collective identity to individualism. Across fiction and nonfiction, and in multiple languages, the pattern holds. Possible explanations for this reversal range from disillusionment with postwar economic promises to the amplification of emotional content through digital media. The authors suggest that neoliberal economic shifts may have undermined trust in expert-driven, rational discourse, opening the door for more subjective and expressive language. Social media, with its emphasis on immediacy and engagement, likely intensified this effect, favouring language that provokes emotional reaction. Still, the authors are cautious. They acknowledge that corpus biases—such as editorial policies or changing literary trends—may influence the data. Yet the consistency of

[114] Scheffer, M., van de Leemput, I., Weinans, E. and Bollen, J. (2021) The Rise and Fall of Rationality in Language. Proceedings of the National Academy of Sciences.

the pattern across independent sources strengthens the case for a genuine transformation in public discourse. This linguistic shift raises urgent questions. Is the decline in rational language merely stylistic, or does it reflect deeper changes in how people think and engage with the world? If language shapes thought, the rise of emotionally charged, individualistic vocabulary may indicate a broader cultural turn away from shared reasoning and toward fragmented, intuitive worldviews. Scheffer and colleagues conclude that societies may now face a choice: allow the drift to continue or strive for a renewed balance—honouring the insights of intuition while reclaiming the grounding force of rational discourse.

Exploitation of social instincts

In 'Wired for Culture: Origins of the Human Social Mind' (2012) Mark Pagel explores how human societies, much like termite colonies, are shaped by scale-free rules that enable complex organisation without centralised control. The comparison may seem unsettling at first. Termites live in tight, impersonal structures, blindly following local rules to build vast mounds. Humans, too, often live in dense cities, cooperating with strangers, guided more by trust in systems than in personal knowledge. We like to believe our behaviours are governed by rational thought, but Pagel suggests otherwise—human societies function on deep evolutionary instincts exploited by cultural systems that evolved far faster than our genes could catch up. This raises a fundamental dilemma. For most of human history, people lived in small bands, never exceeding a few hundred individuals. Evolution shaped us for those intimate settings. Yet today, billions live in sprawling, hierarchical societies. How did this leap happen? The answer lies in the exploitation of basic social instincts—trust, imitation, and reputation. These instincts, once useful in tribal life, now fuel vast bureaucracies, marketplaces, and governments. We follow local rules and trust abstract systems not because we are naturally suited to them, but because culture has repurposed our tribal habits. Scale-free mechanisms—language, reputation, social learning—allow societies to grow without inventing entirely new systems. Like termites dropping pellets by instinct, people contribute to society by following small, predictable scripts: standing in lines, paying taxes, using currency. Out of this emerges self-organised complexity. Air travel, for example, is not coordinated by a single mind; rather, each participant—passenger, pilot, clerk—follows local rules, resulting in global mobility. These instincts can also be manipulated. Leaders often concentrate power by exploiting trust and signalling authority through wealth or symbolic rituals. As Pagel notes, the display of power—buildings, uniforms, pageantry—is not mere decoration but a tool to signal strength and stability. These signals reassure people that the system will endure, even if it means surrendering autonomy. Yet, humans do not just obey—they cluster. Even in large societies, people remain rooted in small groups. This 'social viscosity' preserves trust through familiar connections. Stanley Milgram’s small-world experiment revealed that even in vast populations, people are only a few steps apart. These invisible webs sustain cooperation. They also protect societies from disintegration, though authoritarian regimes often attempt to sever them, using surveillance and fear to prevent collective action. As societies become more diverse, however, shared trust erodes. People increasingly rely on visible cues—language, ethnicity, dress—to determine allegiance. This can fuel division but also reveals the fragility of social cohesion. Pagel argues that our ability to cooperate beyond kin is the true foundation of civilisation. If that falters, the termite mound begins to crack.

The politics of language

In 'Of the Origin and Progress of Language[115]', James Burnett, Lord Monboddo argues that language could not have arisen from human nature alone, nor did it emerge in isolation. It was the result of collective life, of people coming together out of necessity, and only within such early societies could speech have developed. Like agriculture or law, language was a human invention—complex, cumulative, and deeply dependent on the conditions of communal living. To speak meaningfully, Monboddo insists, one must have someone to speak to. A solitary man in the forest, however intelligent or articulate, has no reason to create signs for ideas. Language presupposes society. Before one examines the first sounds or utterances, it is necessary to ask: What brought humans together in the first place? Drawing on Aristotle, Monboddo observes that humans are not purely solitary or purely social. Like boars, horses, or beavers—who vary between individual and group behaviour depending on time and environment—humans are flexible. We are capable of solitude but also inclined, under pressure, to live cooperatively. But this gregariousness, he claims, is not automatic. It arises under threat: from predators, hunger, or scarcity. People began to form bands to share resources, defend themselves, and organise labour. From these early associations, political society emerged—not through instinct, but through invention and adaptation. Language, he argues, is a byproduct of this development. The need to name, warn, divide tasks, and resolve disputes led to signs and then to speech. The more complex society became, the more articulate its language had to be. And with language came the refinement of custom, memory, and law. But neither society nor speech existed at the beginning—they emerged together, and each sustained the other. To reinforce his point, Monboddo turns to historical and natural evidence. Ancient and modern accounts alike describe people living in brutish conditions: naked, without shelter, tools, or structured communication. He points to the South Seas and American frontiers as evidence that humans can live without cities or languages—but only at the edge of survival. Where life becomes more complex—where people build, plan, and share—they inevitably create speech. He also considers the orangutan, then thought to be a kind of wild man. Though these animals use simple tools and show signs of intelligence, they remain solitary and voiceless. They do not form communities or invent shared symbols. Their case illustrates a boundary: mechanical skill alone does not produce society, and without society, speech cannot develop. Civil society, Monboddo concludes, is not natural in the strictest sense. It is not given but made. And speech, far from being a divine gift or biological reflex, was born within this human artifice. It is not enough to breathe or cry out—true language requires intention, reflection, and shared life. It is a political achievement as much as a linguistic one.

Language is not natural to man

Lord Monboddo presents a careful argument against the idea that language is an innate, natural faculty of the human species. Rather than emerging spontaneously like breathing or digestion, language, he claims, is a social invention—developed, refined, and passed on through imitation, memory, and instruction. Monboddo begins by asking a basic but often overlooked question: if language were truly natural, wouldn't it arise universally in the same form across all human groups? Nature, after all, grants her gifts with consistency. Birds of one species sing alike; dogs understand one another's signals without being taught. But when it comes to human speech, no such uniformity exists. Each tribe, each people, speaks a different language. And

[115] Burnett, J. (1774). Of the Origin and Progress of Language.

these languages are not variations on one original code—they differ in sound, grammar, and meaning so completely that they must be learnt anew. If humans were born with a natural language, it would have to be one language, universally understood and spoken without instruction. Yet no such language has ever been found. The diversity of tongues, Monboddo argues, is itself proof that language is not instinctual. Unlike blinking or breathing, speech must be taught. No child begins to speak in complete, meaningful sentences without hearing others first. In fact, without exposure to speech, children do not develop it on their own—something borne out by reports of feral or isolated individuals. These cases support his claim that language is not a built-in function but a learnt art, acquired only through social living. Moreover, there is no evidence of innate phonemes or syntax common to all human languages. Philologists and grammarians have failed to isolate a shared core set of natural sounds or grammatical rules that would serve as the basis for a universal tongue. Even the most basic structures—word order, tense, gender, number—vary widely across cultures. If speech were natural, one would expect at least some consistency. Monboddo also notes that many early or so-called 'savage' societies survive and reproduce without complex verbal language. They use gestures, cries, and signals to convey essential information. If articulate speech were as necessary to human life as digestion or reproduction, then surely it would appear in all societies, regardless of cultural development. But this is not the case. People have thrived with the most minimal vocal systems, proving that speech is a refinement, not a necessity granted at birth. Thus, Monboddo concludes, language cannot be natural in the strict sense. It is an art, created by humans to serve the needs of social life. Like agriculture, music, or tool-making, it emerged through observation, imitation, and necessity. Its development marks a turning point in human evolution, but it did not begin in nature—it began in culture.

Dying words

In 'Dying Words: Endangered Languages and What They Have to Tell Us[116]', linguist Nicholas Evans explores a sobering yet revelatory truth: languages are disappearing at an alarming rate, and with them, entire systems of knowledge, identity, and worldview are vanishing. The book is not merely a lament for lost words—it is a call to attention. Each language, Evans argues, is not just a means of communication but a unique lens on reality, forged over generations by people living landscapes, solving problems, and telling particular stories. The decline of linguistic diversity is often framed as a natural byproduct of globalisation. One might believe that the spread of English or Mandarin makes communication more efficient. But Evans shows that this convenience comes at a steep cost. As languages die—often unnoticed, one speaker at a time—we lose not just vocabulary but irreplaceable ways of seeing and naming the world. Languages capture fine distinctions that dominant tongues may overlook. In some Aboriginal Australian languages, verbs distinguish between the specific ways different marsupials move; in others, verbs for 'give' shift depending on the shape or texture of the object. Such differences are not ornamental—they are deeply tied to culture, ecology, and survival. Evans uses the metaphor of a 'Library of Babel' to express this crisis. Just as Borges imagined a library with every possible book, language diversity represents a library of human thought. But now, huge sections of this library are crumbling. Oral traditions go unrecorded. Grammar structures vanish. Names for local plants, rituals, and cosmologies disappear without a trace. As with biological extinction, the danger is not just the loss of one specimen, but the unravelling of a web of interconnections. The book's strength lies in its

[116] Evans, N. (2010) Dying Words: Endangered Languages and What They Have to Tell Us. Chichester Wiley-Blackwell.

insistence that language loss is not inevitable. It results from political, economic, and cultural choices—pressures that marginalise local languages in favour of national or global ones. Mass media, urban migration, and standardised education accelerate the decline. Yet, Evans also documents communities resisting this trend, revitalising their languages through storytelling, song, and education. Language is deeply embedded in the fabric of thought itself. Evans reminds us that grammar is not just a set of rules but a reflection of a people's perception of time, agency, gender, hierarchy, and the natural world. To lose a language is to lose a cosmos. If we hope to preserve the full story of human possibility, we must learn to listen before the silence sets in.

How language trains thought

Language does more than help people express what they already know—it shapes what can be known. Thought, far from existing outside words, is guided by the paths each language opens. Nicholas Evans, in 'Dying Words', explores how different languages form distinct habits of attention, memory, and perception, effectively training the minds of their speakers to think in particular ways. Language is not simply a reflection of thought; it is a trellis along which thought grows. The way a language categorises the world influences how its speakers understand that world. In English, nouns are divided into countable and uncountable—'two apples' versus 'some water'. But in languages like Yucatec Maya or Japanese, such distinctions are not grammatically necessary; instead, classifiers serve to specify types and quantities. This changes how speakers naturally think about objects and substances. Experiments with children show this effect in action: when taught a novel word like dax, English-speaking children tend to associate it with shape (object-like properties), while Japanese-speaking children emphasise material (substance-like properties). Spatial orientation is another domain shaped by language. Speakers of Guugu Yimithirr, for example, use cardinal directions—north, south, east, west—rather than relative ones like 'left' and 'right'. This linguistic habit requires constant awareness of geographical direction, to the point where even young children in these communities develop exceptional navigational skills. Language, in this case, orients not only speech but the body and perception itself. Time, too, can be carved differently by grammar. The Aymara language of the Andes conceives of the past as being in front—visible and known—and the future behind, as hidden and unknowable. This metaphorical inversion, deeply embedded in the language, appears not just in words but also in gestures, as speakers point forward when referring to yesterday. Such habits demonstrate that grammar is not simply a tool for organising meaning but a framework that arranges thought itself. Evans shows that these effects begin remarkably early. Korean toddlers, for instance, attend more to whether objects fit snugly or loosely—a difference expressed in Korean verbs like 'kkita'—than English-speaking children of the same age, who instead focus on 'in' or 'on'. Language creates attention grooves in the developing brain, reinforcing distinctions that matter within a given culture. This shaping power of language is especially evident in cases where categories do not overlap between tongues. A language like Arammba, with its base-six counting system, leads its speakers to grasp powers of six naturally. Or consider the Kunwinjku word 'kakkak', which combines multiple kinship roles in a single concept foreign to English. These are not merely linguistic oddities but clues to alternative cognitive architectures. While people are all born with the same neurological potential, the language one speaks gradually channels that potential into culturally specific patterns. Each language frames reality differently, offering its speakers a unique stance toward the world. As Evans argues, endangered languages are not just vanishing codes but collapsing trellises—each holding up a distinct way of thinking, remembering, and imagining.

The origins of grammar

In their chapter 'Grammaticalisation Theory as a Tool for Reconstructing Language Evolution[117]' in 'The Oxford Handbook of Language Evolution', Bernd Heine and Tania Kuteva offer a compelling framework for tracing the deep history of language. Where traditional historical linguistics reaches its limits—typically a few millennia—grammaticalisation theory steps in, allowing inferences about earlier stages of human communication. The key to this approach is recognising that certain types of linguistic change follow universal and unidirectional pathways. Lexical items gradually become grammatical, and grammatical items in turn evolve into even more abstract structures. This regularity makes it possible to reverse-engineer the likely features of earlier languages. The process of grammaticalisation begins when a word with a clear, concrete meaning—such as a noun for a body part or an object—begins to take on a grammatical function. Over time, such a word might lose its original meaning and become a marker of tense, aspect, or definiteness. For example, the Latin demonstrative 'ille' ('that') gradually transformed into the French article 'le' ('the'), and the Latin numeral 'unus' ('one') became 'un' ('a'). These transformations are not random but follow a cognitive logic. Humans use what is familiar and perceptible to express abstract, relational, or contextual meanings. That process never reverses—articles do not turn back into demonstratives, for instance. This unidirectionality provides a map of language evolution: if a form exists today as an article, one can infer that it likely began as a demonstrative or numeral. This methodology rests on several principles: languages always change, speakers are inventive, linguistic forms are repurposed for new functions, context matters, and change tends to follow a directional path. Using these principles, one can reconstruct plausible stages in the emergence of grammatical systems. If modern languages contain definite and indefinite articles derived from demonstratives and numerals, then it is likely that earlier languages lacked articles altogether. What seems intuitive today—articles as a basic component of grammar—was once entirely absent. To visualise this historical development, Heine and Kuteva propose a layering model that organises grammatical evolution into six stages. Initially, languages consist only of nouns or noun-like forms. Then verbs emerge, enabling simple sentence formation. With subsequent layers, adjectives, adverbs, and more sophisticated phrase structures develop. Eventually, the system incorporates subordination and the abstract complexities of modern grammar. Each layer builds on the last, reflecting not only the growth of linguistic structures but also a progression in cognitive abstraction. Importantly, this model does not imply that all modern languages reach the same endpoint. Languages like Mandarin Chinese appear to lack much overt morphosyntax, yet still exhibit grammaticalisation processes, particularly in how they express aspect. Chinese does not have a past tense marker like English's '-ed', but it uses adverbs and particles to convey similar meanings. This supports the idea that even when surface structures differ, the underlying pathways of evolution remain consistent. Thus, grammaticalisation theory does more than trace how language changes—it provides a method for inferring how grammar came to be. Rather than assuming grammatical categories emerged fully formed, the theory reveals a slow accretion of structure through everyday use, interaction, and cognitive adaptation. Words that once named things became tools for expressing time, space, modality, and eventually the full range of human thought. The authors argue that grammar did not appear suddenly but emerged layer by layer through refunctionalisation of pre-existing elements. This view presents grammar not as an arbitrary invention but as a response

[117] Heine, B. and Kuteva, T. (2011). "Grammaticalization Theory as a Tool for Reconstructing Language Evolution." In M. Tallerman and K. R. Gibson (Eds.), The Oxford Handbook of Language Evolution. Oxford University Press.

to the communicative and cognitive pressures of human life. Through grammaticalisation, the ordinary becomes symbolic, and in doing so, language becomes the flexible, open-ended system it is today.

2.3. Moral progress

(From Instincts to Ideals: Charting moral advancement)

'Of moral purpose I see not a trace in nature. That is an article of exclusively human manufacture'.

— Thomas Henry Huxley, Evolution and Ethics

'Morality has no other demonstrable ultimate function'.

— E. O. Wilson, On Human Nature

Language, man, and society

In 'Language, Man and Society', James Burnett, Lord Monboddo, presents a strikingly original and deeply philosophical account of language's emergence, arguing that speech is neither an instinct nor a biological given but a product of social invention and reflective intelligence. Monboddo's work, situated in the intellectual world of the Scottish Enlightenment, draws on classical traditions and speculative anthropology to explore the question not just of how language developed, but what it reveals about human nature itself. For Monboddo, language is the most astonishing of human arts—more intricate than any craft, and more central to human life than even agriculture or metallurgy. Yet, unlike the instinctual cries of animals or the fixed calls of birds, language is not spontaneous. It does not arise fully formed from nature, nor does it appear in any one universal form among all peoples. Every human tongue must be learnt, taught, passed from speaker to speaker, and gradually refined. This alone, he argues, refutes the claim that speech is a natural faculty. Speech, Monboddo insists, presupposes society. Humans did not begin speaking while alone in the wilderness, nor could a solitary figure have invented it. The very need for communication arises only within collective life—for shared labour, mutual defence, or the transmission of thought. Thus, society gave birth to speech, not the other way around. And like all human arts, it developed in stages: from gestures and cries to imitative sounds, then to articulate speech and, eventually, the poetic and rhetorical flourishes of mature language. His view draws from and extends the insights of other Enlightenment thinkers, including Rousseau and Condillac, but Monboddo is distinctive in rooting his theory in both comparative natural history and ancient philosophy. He often refers to the orangutan—not to equate it with humanity, but to mark the limits of imitation and the absence of communal invention. Though some apes may mimic tools or gestures, they never speak, organise, or develop culture. For him, this absence of shared language and political society marks the boundary between human and animal. Language is not simply sound—it is the expression of general ideas. And general ideas, too, are not innate. They emerge from experience and reflection: sensation leads to memory, memory to abstraction, abstraction to comparison, and comparison to universals. In this ascending process, one sees how language depends on thought and thought on social and sensory experience. Thus, even the formal content of language—its ideas, not just its words—is acquired, shaped, and cultivated over time. Monboddo laments that modern science, enamoured with mechanical explanations, has neglected this fundamental truth: that man is, above all, a social and rational animal whose most powerful tool—language—is the fruit of centuries of cooperative life. He sees in ancient Greek

the highest refinement of this art and calls for a return to the classical ideal—not to mimic the past, but to restore depth and dignity to our discourse. Though much of Monboddo's theory may now seem speculative, his insight that language is a social invention, not a biological reflex, remains profoundly relevant. In an age where the boundaries between machine code and human speech blur, and where cultural transmission faces fragmentation, his call to recover the roots of language in shared human endeavour has gained renewed urgency.

The idea of moral progress

In 'The Idea of Moral Progress[118]', Michele M. Moody-Adams argues that moral progress is not only real but achievable, though always within specific cultural or historical contexts rather than by moving toward a fixed ethical endpoint. Her thesis holds that moral progress unfolds locally—within practices, institutions, or domains of belief—by refining existing moral concepts rather than inventing entirely new ones. Such progress occurs not through discovering unknown moral universals, but through deepening the understanding of ideas people already grasp intuitively, like justice, equality, or dignity. Rather than imagining moral progress as a linear ascent toward a predefined utopia, Moody-Adams presents it as a kind of ethical thickening: one sees more clearly what a concept like justice entails, and one's emotional and social imagination becomes better attuned to its practical demands. For example, historical movements for abolition or women's rights did not invent new categories of right and wrong but called attention to contradictions in prevailing norms—making visible, through protest or critique, what had always been morally salient. This process reveals what she calls the 'semantic depth' of moral ideas: their full range and implications unfold only when they are tested against new human experiences. A key insight of Moody-Adams's work is that progressive moral change requires not only intellectual clarity but also the capacity to integrate new interpretations into existing belief systems. People act on moral beliefs not in isolation but through patterns of emotions, habits, and social roles. Thus, successful moral insight depends on its ability to 'fit' the web of attitudes and emotions already in place. Philosophers like Bentham, Kant, and Rawls, though often seen as introducing grand theories, largely sought to articulate commitments embedded in common moral reasoning. Even Peter Singer's appeal to aid distant strangers rests on ordinary notions of compassion and fairness extended by degree, not category. Moody-Adams also stresses that the dissemination of moral insight is not primarily a philosophical task. Change is often driven by activists and social critics who provoke public conscience—sometimes by exposing hypocrisy, other times by offering compelling personal examples. Civil rights leaders, feminist thinkers, and other reformers have historically played this role, not by creating new moral languages, but by urging society to live up to what it already claims to believe. Their task is to disturb the comfort of partial or shallow moral understandings, not to replace them wholesale. The real enemy of moral progress, Moody-Adams contends, is not a lack of moral imagination but a refusal to examine familiar norms. Most societies possess the tools for critique, but they often suppress their use. When people act as if they do not know what they, at some level, already suspect to be wrong, progress stalls. Conversely, institutional changes motivated by self-interest or pragmatism can sometimes foster genuine insight, showing how belief and behaviour can evolve together. The morally engaged life embraces criticism, reflection, and moral dialogue as essential to human dignity. While moral progress

[118] Moody-Adams, M.M. (1999). The Idea of Moral Progress. Metaphilosophy, 30(3), pp.168–185. doi:https://doi.org/10.1111/1467-9973.00120.

may be uneven and never final, its possibility rests in the constant effort to understand better what people already sense to be true.

Moral evolution

Moral progress and the evolution of morality represent two distinct yet intertwined trajectories in human development—one tracing cultural shifts in ethical understanding, the other uncovering the biological roots of moral behaviour. While moral progress refers to deliberate improvements in values, laws, and institutions, moral evolution considers how moral instincts may have emerged as adaptive traits in our ancestors. Together, they offer a fuller view of how humanity's ethical landscape has formed and continues to change. The growing richness understanding of moral concepts suggests that true progress involves not only better laws, but deeper insight into justice itself. Allen Buchanan and Russell Powell's 'The Evolution of Moral Progress[119] ' offers a naturalistic theory of moral development that challenges the view that evolved human psychology imposes fixed limits on inclusivity. Building on recent work in philosophy, psychology, and the social sciences, it argues that moral progress is possible when stable, secure social conditions allow for the expansion of inclusive values. Their biocultural theory highlights how human moral responses are shaped by both innate psychological traits and external circumstances. Under threat, humans revert to exclusivist, parochial morality; under safety, they are capable of broader moral concern and sustained moral progress. Moral progress describes as changes in institutions and practices that lead societies toward more just and desirable conditions. Yet progress need not be the result of moral conviction alone. External forces—such as legal mandates or economic incentives—can push individuals and groups toward better behaviour even when comprehension lags. Still, many significant shifts, like those brought by abolition or civil rights movements, emerge from within: social movements that challenge norms and redefine ethical possibilities. The typology of moral progress includes improved moral motivation, expanded concern for others, and more refined ethical reasoning. One telling indicator is the widening of the 'moral circle'—a phrase used to describe humanity's growing recognition of moral standing in groups once excluded. The inclusion of non-human animals in ethical considerations as a contemporary marker of progress, grounded in an awareness of sentience rather than species alone. Such shifts point not only to institutional reform but to a transformation in how people perceive moral status itself. The evolution of morality, by contrast, explores the deep biological underpinnings of such sentiments. Among social animals—from insects to mammals—altruistic behaviour emerges when cooperation serves survival. Sterile ants that sacrifice reproduction for colony welfare, or chimpanzees that share food and comfort distressed peers, show that social cohesion can precede abstract moral reasoning. If primates possessed 'premoral' sentiments—empathy, reciprocity, even a sense of fairness—that can be the scaffolding upon which human morality is later built. As early human societies expanded from small bands into complex states, these biological inclinations had to be stabilised through more formal systems—rules, reputational norms, and eventually religion. Supernatural beliefs reinforced cooperation by introducing ever-present, moral observers. Whether ancestral spirits or divine judges, such figures extended the reach of social monitoring and encouraged restraint even in solitude. Yet evolution offers no simple ascent. Some theorists argue that partially altruistic individuals may have been punished more severely than consistent egoists, creating an 'adaptive valley' that made the evolution of moral awareness difficult.

[119] Buchanan, A. and Powell, R. (2018). The Evolution of Moral Progress. Oxford University Press.

Others highlight the paradox of punishment itself: if only the aware are punished, awareness may become maladaptive. These puzzles underscore the complexity of aligning self-interest with moral insight. Still, the cognitive tools that support moral behaviour—such as theory of mind and emotional responses like disgust—point to a deep interplay between social intelligence and ethical norms. Neurological evidence shows that moral violations activate areas associated with primal emotions, suggesting that reason alone does not govern moral judgment. In short, moral progress and moral evolution reflect two lenses on the same arc: one shaped by social struggle and conceptual refinement, the other by ancient instincts moulded for cooperation. Ethical improvement does not emerge solely from reasoned ideals or biological necessity, but from the tension between both. Moral awareness, once anchored in survival, now strives for justice.

Moral progress

In 'Moral Progress: An Introduction[120]', Albert W. Musschenga and Gerben Meynen lay the foundation for a broader discussion about whether, how, and in what sense human societies improve morally over time. The text sets out to clarify a problem both philosophical and practical: what does it mean to say the world is morally better now than it was a century ago—and how might one intentionally move it further in that direction? The authors begin by emphasising that not all change qualifies as progress. Just as a patient regaining weight might not be recovering health, or a house's accidental improvement may not reflect the vision of an architect, a shift in social practice only counts as moral progress if it leads to a better outcome and is meaningfully connected to what preceded it. Random improvements do not establish a trajectory. Moral progress implies more than isolated advances—it requires an intelligible, causally linked sequence of changes in beliefs, practices, or institutions that reflect a moral deepening. This insistence on causality is central. Without a sense of continuity, improvement becomes indistinguishable from coincidence. The process of progress, Musschenga and Meynen argue, must be traceable: people or institutions must do something to effect change, and the change must respond to moral concerns. A society may become more inclusive, less violent, or more rights-conscious, but unless those changes are driven by some recognition of what is right, they do not count as moral achievements in the full sense. Another crucial aspect is the difficulty of defining the standard by which 'better' is judged. Without agreement on what counts as moral good—justice, equality, freedom, compassion—it becomes nearly impossible to assess progress. Yet, the authors do not demand a universal moral framework. Instead, they advocate for practical strategies that can be applied within specific cultural or institutional contexts, guided by shared understandings of ethical improvement, even if global consensus remains elusive. The broader project, then, is threefold: first, to clarify what is meant by moral progress conceptually; second, to develop reliable ways to measure such progress empirically; and third, to apply this understanding in shaping policies, institutions, and actions. This practical dimension is vital. Without tools for implementation, even the most robust ethical theory risks becoming idle reflection. By linking theory with real-world application, the volume aims to help communities recognise where moral progress has occurred and how to foster it further. Musschenga and Meynen argue that thinking seriously about moral progress demands more than optimism or idealism—it requires conceptual rigor, empirical grounding, and a commitment to deliberate action.

[120] Musschenga, A. W. and Meynen, G. (2017) Moral Progress: An Introduction.

Emotional construction of morals

In 'The Emotional Construction of Morals[121]', Jesse J. Prinz explores the possibility of moral progress without relying on absolute standards. His approach blends relativism with emotional constructivism, arguing that morality arises from cultural and emotional responses rather than objective truths. This poses an immediate challenge: if moral systems are historically and culturally contingent, how can we speak of improvement at all? Can one moral order be better than another without appealing to some fixed ethical framework? Prinz begins by distinguishing between two kinds of nihilism. The first, often linked to thinkers like Mackie, denies the reality of moral facts altogether—arguing that all moral claims are fundamentally false. The second, softer version allows for moral truth but denies the possibility of ranking one moral system above another. If morality is merely an expression of local norms and sentiments, then changes from one system to the next might be seen as lateral shifts rather than upward progress. Yet Prinz resists this conclusion. He contends that even within a relativistic framework, moral progress is possible—but only from within. There is no god's-eye view from which to measure better and worse moralities. Rather, change happens like a ship rebuilt at sea: while floating in one moral system, people repair it piece by piece by identifying inconsistencies, resolving contradictions, and responding to practical demands. Progress, in this view, means greater internal coherence, broader applicability, and alignment with values such as welfare, stability, and inclusiveness. This incremental process uses existing norms as tools for self-correction. When a community promotes kindness yet ignores distant suffering, the inconsistency invites revision. Such reform might not overthrow the old framework but deepen it—extending the principle of compassion across borders. Importantly, Prinz includes non-moral standards—such as practicality, effectiveness, and emotional resonance—as part of the evaluative toolkit for judging moral improvement. However, this method does not guarantee benevolence. Prinz warns of 'coherent evil'—systems like Nazism that may be internally consistent but fail on broader human criteria like compassion, universality, or wellbeing. True progress, he argues, must satisfy a diverse range of standards, not merely fit a logical structure. Prinz also examines the traps that can hinder or distort moral evolution. These include romanticising contemporary values while misjudging the past, employing unjust means for allegedly moral ends, and mistaking control or obedience for virtue. He highlights the risk of corruption in institutions and the dangers of treating morality as fixed. Moral rigidity, he suggests, is the enemy of progress. Rather than aligning with Kantian duty, utilitarian calculus, or Aristotelian virtue as absolute foundations, Prinz sees these frameworks as instruments among many. Human morality spans multiple domains—fairness, loyalty, purity—and no single principle can account for them all. A pluralistic model better fits the complexity of moral life. Importantly, morality must not be discarded. Though its foundations are emotional and constructed, it performs essential social functions: regulating behaviour, guiding cooperation, and generating accountability. Without moral sentiments like guilt or compassion, societies would unravel. Prinz proposes a vision of moral progress grounded in emotional realism and cultural reflection—a project that affirms moral change as both possible and necessary, even in the absence of universal truths.

[121] Prinz, J.J., 2007. The Emotional Construction of Morals. Oxford: Oxford University Press.

Louder than words

Understanding language is not just about words and grammar—it is about what happens in the mind when people make sense of them. In 'Louder Than Words[122]', Benjamin Bergen explores how meaning is not a static definition stored in the brain, but a living, dynamic experience recreated through the body and its systems. When people read or hear words, their minds simulate what those words describe, drawing on sensory, motor, and emotional systems to generate meaning. This idea—called embodied simulation—challenges centuries of thinking. For a long time, language was seen as abstract and logic-based, disconnected from physical experience. The classical view assumed that meaning could be stored in the form of mental definitions, like dictionary entries in the brain. But Bergen, drawing on decades of cognitive science research, argues that this is not how meaning really works. Take a simple story about a polar bear sneaking across snow. Readers might mentally see the scene and imagine the cold, the texture of snow, or even the act of hiding a black nose with a paw—details that are not stated but are essential to the story. This ability to fill in missing parts is not due to logic or definitions, but simulation. The brain, when understanding the sentence, re-creates the experience using visual and motor areas, almost as if the person were there. What makes this process remarkable is its unconscious precision. People rarely notice that they are doing it, yet it happens all the time. A sentence like 'The driver gripped the wheel and honked the horn' creates different mental experiences depending on whether the sentence uses 'you' or 'he'. One triggers a first-person simulation, the other a third-person one. The brain adapts, switching perspective effortlessly. Grammar plays a crucial role in shaping these simulations. It does not just link words—it tells who did what to whom, what role each element plays, and whether the event is ongoing or complete. In this way, grammar helps build the scene in the mind, acting not as a rigid rulebook but as the scaffolding for imagination. Bergen also shows how small grammatical changes affect mental focus. A verb in the progressive aspect ('was running') prompts readers to imagine the action unfolding. The perfect aspect ('had run') draws attention to its completion. These changes might seem trivial, but they shift how one mentally constructs reality. Meaning is not found in dictionaries or even in the words themselves. It lives in the brain, shaped by experience, guided by grammar, and embodied through perception and action. The mind does not just interpret language—it performs it.

Meaning in your grasp

'Louder Than Words' explores one of the great mysteries of language: how people understand not just concrete descriptions like 'the bear ran across the ice', but also abstract ideas such as freedom, responsibility, or society. The central theory Bergen presents—embodied simulation—suggests that people make sense of words by mentally re-enacting experiences through perception, action, and emotion. When a word like 'grasp' is used metaphorically—as in 'grasp an idea'—the brain does not just decode a symbol. Instead, it may subtly activate the physical experience of grasping, linking abstract understanding to concrete action. This idea becomes more intriguing when it moves beyond physical descriptions. How can simulation explain our grasp of abstract concepts? Bergen shows that much of abstract language borrows from the physical world. People say they have 'swallowed' an idea, 'carried the weight' of a decision, or 'fallen into despair'. These are not just figures of speech—they hint at how humans might understand such concepts. Even ideas like society or time are often expressed using concrete metaphors. A society can have 'cracks', be 'closed', or 'fall apart'. Time 'flies', 'drags',

[122] Bergen, B. K. (2012) Louder Than Words: The New Science of How the Mind Makes Meaning. New York: Basic Books.

or 'passes'. These metaphors do not just colour language; they help structure thought. Supporting this theory, experiments show that people process metaphorical expressions more efficiently after physically performing the corresponding actions. Someone who just mimed grasping, for example, may understand the phrase 'grasp an idea' more quickly. Brain imaging adds further weight. Regions involved in motor control often activate when people process metaphorical verbs like 'kick the habit' or 'shoulder the blame'. These findings suggest the mind uses the body as a framework to understand not just the physical world, but also symbolic meaning. Yet this connection is not always consistent. Familiar phrases like 'bite the bullet' may activate these systems less strongly—perhaps because repeated use weakens the vividness of the metaphor. Still, novel or emotionally charged metaphors seem to prompt more robust simulations, pointing to a deeper connection between freshness in language and the brain's response. Bergen also explores fictive motion—phrases like 'the road runs along the coast', where nothing literally moves. Readers still imagine motion, suggesting the brain prefers dynamic representations even for static situations. This preference for action helps build rich, flexible models of meaning. Bergen argues that even when people speak about ideas they cannot touch or see, their understanding remains grounded in physical experience. The brain does not just store meanings like entries in a dictionary. It performs them—running simulations that make meaning feel vivid, lived, and real.

Repurposed mind

When Benjamin Bergen opens 'Louder Than Words' with a vivid scene of a polar bear hunting seals, he does more than set the tone—he provides a demonstration of how meaning is constructed through embodied simulation. Even if the detail about a bear covering its nose is apocryphal, the story draws readers into an experience they can imagine. The crunch of snow, the slow crawl of a predator, the anticipation of a pounce—all come to life, not because they are seen, but because the mind reenacts them. This kind of mental reenactment lies at the heart of Bergen's argument. Language does not just pass information from speaker to listener in neat, encoded packets. Instead, words evoke simulations—sensory, motor, emotional experiences—that help listeners or readers reconstruct meaning in their own minds. The traditional view of language as an abstract symbolic system, detached from bodily experience, fails to account for how deeply perceptual and motor systems are involved when people process even the simplest phrases. Understanding is not just decoding; it is doing—mentally. But what happens when language leaves the physical world behind? When people talk about concepts like justice or society or time, there is nothing to see or hear or touch. Here, too, Bergen shows that people reach for the concrete. Abstract ideas are almost always expressed through physical metaphors: time flows, arguments are attacked, and society has cracks that people can fall through. These are not just figures of speech. They are cognitive strategies. Language borrows from bodily experience to make sense of what cannot be directly sensed. This ability to simulate is not limited to language. It is a product of evolution's thrift. Rather than inventing new systems for complex reasoning, human brains repurposed older systems built for perception and action. The brain did not evolve a special 'language organ'—it tweaked and adapted what was already there. This recycling is why the motor cortex lights up when someone hears a sentence like 'grasp the idea'. It is also why math, music, and even moral reasoning draw on spatial and bodily metaphors. In this light, communication becomes a much more fragile process. It is not the perfect exchange of ideas, as classical models suggested. Instead, it is a dance of approximations. A speaker tries to evoke a world in the listener's mind, and if their simulations align closely enough, understanding happens. Meaning is not transmitted like data—it is recreated in motion, shaped by memory, context, and culture. The miracle of language is not its

precision but its adaptability: it works, not because it is flawless, but because it is flexible enough to let people meet in the middle.

Noise matters

Communication, whether in animals or humans, is always imperfect. R. Haven Wiley's 'Noise Matters: The Evolution of Communication[123]' argues that noise is not merely an obstacle to overcome but a fundamental component of communication itself. It shapes how signals are sent, received, and interpreted, influencing both behaviour and evolution. This insight, grounded in decades of empirical research, challenges the ideal of perfect transmission and suggests that all acts of communication are shaped by an unavoidable friction between message and reception. Noise enters communication through the environment, physiology, and perception. Animals and humans alike must filter signals from a background filled with irrelevant stimuli. Wiley shows that contrast—how clearly a signal stands out from its surroundings—is essential. Birds sing at dawn, not just for poetic reasons, but because the world is quieter then. Rainforest species, overwhelmed by insect drone, shift their frequencies downward to be heard. Communication systems thus adapt to the noise of their environments, not only in pitch or timing but in signal structure itself. Repetition and predictability enhance detectability, not because complexity is favoured, but because noise demands redundancy. Wiley frames these adaptations as the result of a coevolution between signallers and receivers. Signals are not static—they are shaped by the responses of their audience, and the audience in turn develops sensory tools tuned to the kinds of signals worth responding to. But this mutual tuning cannot eliminate errors. Even in well-adapted systems, signallers must exaggerate, repeat, or ritualise their signals to cut through the static. A songbird does not sing once; it repeats a recognisable pattern, shaped not for elegance but for persistence against interference. These behaviours, often interpreted as expressive, are in fact tactical. Errors are not only inevitable—they are structured. The types of mistakes a receiver makes define how communication evolves. Wiley notes that signal detection requires balancing two conflicting types of errors: false positives and false negatives. The receiver must judge whether a signal is real or noise, familiar or alien, honest or deceptive. No system can optimise for both at once, so communication develops around trade-offs. These trade-offs, in turn, give rise to categorisation: signals are sorted into familiar types, just as people are socially categorised as friend, rival, or stranger. In social species, especially humans, this becomes foundational. Recognition is not a bonus feature but a necessity. Knowing who is speaking—and what group they belong to—affects every subsequent decision. Noise complicates this process. It ensures that signals are always partly ambiguous, and therefore that recognition always carries the possibility of error. These errors shape not only relationships but also the evolution of social strategies, from cooperation to competition. Communication, then, is not simply about information transfer. It is an evolved system of behaviours designed to minimise the inevitable distortions of noise. Wiley argues that even honesty, often seen as a communicative ideal, is a statistical tendency rather than a rule. Deception exists not as a breakdown but as a possibility structured by noise. The same conditions that allow clear understanding also allow manipulation. In this view, science, language, and even thought is vulnerable. If perception is shaped by noisy inputs and responses are tuned to probabilistic outcomes, then understanding itself is a kind of noise-conditioned behaviour. The mind, like the animal receiver, reaches not for certainty but for best guesses

[123] Wiley, R.H. (2015) Noise Matters: The Evolution of Communication. Harvard University Press.

under constraint. As Wiley concludes, noise is not just a background feature—it is the condition of communication, and therefore the condition of knowledge itself.

Emotional mind

In 'The Emotional Mind: The Affective Roots of Culture and Cognition[124]', Stephen T. Asma and Rami Gabriel present a compelling alternative to the dominant paradigms in psychology and philosophy of mind. Moving beyond the computational and behavioural models that have long shaped the field, they argue that affective systems—emotions, moods, and drives—form the biological core of human cognition. Unlike symbolic processors or neural modules that operate in disembodied abstraction, emotions are deeply rooted in evolutionary history and shape not only perception and motivation but also culture, language, and social organisation. The authors begin by revisiting Darwin's early insights into emotional expression in animals and humans, an area sidelined by behaviourism and later by cognitive science's obsession with information-processing models. In contrast to these paradigms, Asma and Gabriel advocate for a view grounded in affective neuroscience—a field that, thanks to researchers like Jaak Panksepp and Antonio Damasio, has demonstrated that primary emotional systems are not the byproducts of cognition but its very substrate. These emotional circuits, such as fear, care, play, and rage, evolved long before the neocortex and continue to influence higher-order thinking. In this sense, consciousness is not an emergent rational faculty but a layered process, with ancient affective systems feeding into more recent symbolic and linguistic ones. Language, under this view, emerges not as a pure naming system but as a tool for managing social emotions—an extension of grooming behaviours into the auditory and imaginative realms. The book highlights that emotions are not irrational residues to be overcome by reason but organising principles of mental life. The authors explain how affective systems serve as somatic markers, guiding attention, assigning significance, and prioritising behaviour. Concepts, far from being neutral mental files, are affectively loaded, formed through patterns of experience and association, not detached propositions. Meaning itself is shown to be an embodied phenomenon, shaped by ecological feedback and emotional resonance. Asma and Gabriel criticise the long-standing tendency in philosophy to treat emotions as propositional attitudes. Instead, they advocate a model of affective intentionality, where emotions are not judgments about the world, but directional forces embedded in an organism's practical engagements. Drawing from evolutionary psychology, developmental neuroscience, and cultural anthropology, they present emotions as the bridge between biology and culture. Language and imagination, for instance, are viewed as affectively charged systems. Linguist Daniel Dor's idea of language as an 'imagination-instructing system' is invoked to show how speech cues listeners to construct internal scenes shaped by both memory and emotion. In this sense, language decouples thought from immediate perception while remaining anchored in affective motivations. 'The Emotional Mind' offers a biologically and culturally integrated framework for understanding how emotions give rise to cognition, meaning, and social order.

Cooperation and religion

In 'The Emotional Mind: The Affective Roots of Culture and Cognition', Stephen T. Asma questions whether the so-called 'Holocene cooperation problem' is as novel or puzzling as often claimed. The idea that larger, anonymous societies faced a new challenge of maintaining cooperation without close kinship ties overlooks the emotional capacities that humans had long

[124] Asma, S.T. and Gabriel, R. (2019). The Emotional Mind: The Affective Roots of Culture and Cognition. Harvard University Press.

before the rise of states. The CARE system, which evolved in the Pleistocene, already allowed humans to extend empathy and altruism beyond immediate family. Cultural practices like shared rituals and ornamentation further amplified this capacity, fostering cooperation among non-kin. Rather than inventing moral systems from scratch during the Holocene, humans were building on preexisting emotional infrastructures that had long supported social cohesion. Asma also challenges the idea that modern humans live in truly anonymous societies. Even in cities, people function within small-scale networks—neighbourhoods, religious groups, families. These affiliations, not abstract citizenship, are the true sources of moral behaviour and cooperation. The supposed transition from tribal ethics to stranger ethics may be overstated. Altruism is still largely grounded in local, emotionally meaningful relationships. Another critique Asma offers concerns the common paradoxes attributed to religion: that it involves high costs and centres around unverifiable claims. But these so-called paradoxes dissolve when viewed through the lens of affect. Religion provides real, tangible benefits. In many parts of the world, temples and churches are not just places of worship but also hubs for social services, education, charity, and community bonding. In under-resourced societies, religious institutions often function as lifelines. Religion also encourages prosocial behaviour; religious adherents consistently give more to both religious and secular causes than non-believers. Furthermore, religion was never a rational menu of beliefs picked for utility. It was—and remains—a lived experience, enmeshed in daily life. Animistic beliefs, for example, are not illogical remnants of primitive thought. They are adaptive ways of managing uncertainty and anxiety in environments where natural forces remain unpredictable. Offering gifts to local spirits in Southeast Asia or seeking blessings for a home are emotionally coherent actions. They restore agency in a world that otherwise feels uncontrollable. Asma emphasises that religion helps humans regulate powerful emotions. Rituals serve to calm, reorient, and strengthen individuals facing stress, grief, or fear. These practices, far from being irrational, are emotionally efficient. They function like psychological tools, managing internal states when external control is impossible. Religious morality also reshaped values. Virtues like humility and compassion replaced older ideals of pride and aggression, adapting emotional dispositions to new social realities. Religion, in this light, is not an intellectual error. It is an emotional technology—an evolved cultural system built to manage fear, foster trust, and maintain cohesion in ever-growing human societies.

3. GENESIS THEORIES

3.1. Gregory Bateson

(Systems, signals, and the sacred: Gregory Bateson's legacy of thought)

'The major problems in the world are the result of the difference between how nature works and the way people think'.

— Gregory Bateson, An Ecology of Mind

Double Bind

Gregory Bateson's work invites a shift in how people understand knowledge, language, and communication. In 'Gregory Bateson: Epistemology, Language, Play, and the Double Bind[125]', Edmond Wright unpacks how Bateson's ideas offer not only a theory of systems also a radical way to think about meaning, perception, and the fragility of understanding in a complex world. At the heart of Bateson's epistemology is his metaphor of 'binocular vision'. Just as two eyes provide slightly different angles to generate a sense of depth, two perspectives on an idea—held in tension—allow a more layered view of reality. Knowledge does not emerge from a single, linear stream but from a pattern of differences. This relational view challenges rigid, monologic systems that try to fix truth in closed definitions. Instead, learning happens through difference, through contrast, and through the dynamic interplay of perspectives. This leads to Bateson's critique of 'tautological systems'—those that function in closed loops, incapable of adaptation. Such systems only reinforce themselves, blind to novelty, unable to respond meaningfully to a changing environment. Evolution, in contrast, depends on unpredictability, error, and flexibility. Bateson links this to a distinction drawn from Jung between the 'pleroma' (the world of undifferentiated matter) and the 'creatura' (the world of living systems that interpret and respond). Humans belong to the latter: their survival depends not just on reacting but on interpreting—on learning how to learn. Language, for Bateson, is both a tool and a trap. It allows people to share understanding and act cooperatively, but it also carries ambiguity, hidden assumptions, and the potential for confusion. Bateson described how meaning arises from a mix of 'digital' (discrete, symbolic) and 'analogic' (continuous, relational) communication. This ambiguity becomes especially important in play, which he saw as a key to understanding how humans learn to signal intent. In play, a bite is not a real bite. A child knows it is 'just play' because of the 'meta-communicative frame'—the message 'this is not what it seems'. From here, Bateson introduced the concept of the 'double bind'. This occurs when someone receives contradictory messages, both of which are important, yet impossible to reconcile—like a parent saying, 'Be spontaneous!' The child, caught in an irresolvable loop, may develop patterns of anxiety or breakdown. Bateson saw this not as a simple psychological event but as a structural flaw in communication, particularly within close, emotionally charged relationships. The double bind reveals the fragility of trust and the complexity of signalling meaning in layered human contexts. For Bateson, communication was never merely about transmitting information. It was about 'learning'—how systems correct themselves, how meaning is negotiated, and how people survive not through certainty, but through play, adaptability, and mutual framing. He warned that closed systems—whether ideological, scientific, or familial—risk collapse. Understanding requires doubt, trust, and above all, the willingness to look at the world through more than one eye.

A communication dilemma

The concept of the double bind, introduced by Gregory Bateson reveals how communication can become a psychological trap. At its core, a double bind occurs when an individual is subjected to conflicting messages within a crucial relationship, particularly one from which they cannot easily withdraw. These contradictory messages create an impossible situation where any response leads to failure or punishment, and where even recognising the paradox is forbidden. Bateson originally developed this idea in the 1950s while examining communication patterns in families affected by schizophrenia. He and his colleagues noticed

[125] Wright, E. (ed.) (2005).Gregory Bateson: Epistemology, Language, Play, and the Double Bind. Nova Science Publishers.

that some individuals were immersed in environments where trust and affection were conditional, contingent upon decoding unclear and often self-contradictory signals. For instance, a mother might say 'I love you' while stiffening her body or averting her gaze, sending a second, opposing message through her actions. The child, bound by dependence, is unable to confront the contradiction or flee the relationship, leading to confusion that may become internalised over time. A double bind, according to Bateson, is more than a momentary contradiction; it is a structure. It involves a primary injunction—'do this or you'll suffer'—paired with a secondary, conflicting injunction, such as 'do this, but only if you want to'. A third level often blocks any attempt to question the situation, making escape or resistance impossible. The subject is left in a loop of impossible choices, where the path to resolution is obscured by emotional stakes and hierarchical constraints. Wright emphasises that these binds are not limited to pathological contexts. They exist in everyday life, embedded in family relations, educational systems, romantic dynamics, and even professional environments. A teacher might tell a student to 'be creative' while strictly grading for conformity. A boss may expect initiative but punish decisions taken without permission. These binds corrode the individual's sense of agency and blur their grasp of reality. What makes the double bind so destructive is its stealth. Unlike overt control, it operates through ambiguity and implication. Its harm is not always visible in the moment but accumulates over repeated interactions. Over time, a person subjected to chronic double binds may develop maladaptive coping strategies or dissociative patterns simply to preserve a sense of coherence. Yet Bateson also saw potential in paradox. In some therapeutic or spiritual contexts, double binds can provoke insight rather than confusion. Zen koans—riddles that defy logic—are a type of benign double bind, designed to frustrate ordinary thinking and open new dimensions of understanding. In the end, the double bind reflects a deep truth about language: that communication is not merely about information transfer but about relationship, trust, and the often-fragile structures of shared meaning.

Schismogenesis

Schismogenesis, a term coined by Gregory Bateson, refers to a process in which social behaviours—particularly patterns of interaction—become increasingly polarised through cycles of mutual reinforcement. Introduced in 'Naven' (1935), his study of the Iatmul people of New Guinea, the concept describes how cultural and interpersonal differences do not just exist but grow over time through feedback loops that amplify rather than resolve tension. Bateson's insight was that these dynamics could either stabilise or destabilise societies depending on how they were recognised and managed. Among the Iatmul, Bateson observed that the 'naven' ritual, which involved exaggerated role reversals between men and women, served a critical function: it helped interrupt schismogenic patterns before they became destructive. He identified two primary forms. In 'symmetrical schismogenesis', individuals or groups imitate and escalate each other's behaviour competitively—such as boasting, rivalry, or arms races. In 'complementary schismogenesis', contrasting roles—like dominance and submission—intensify through reciprocal exaggeration. A dominant figure's assertiveness provokes greater passivity in a subordinate, which then encourages even more dominance, and so on. Both patterns, if left unchecked, can spiral into conflict or collapse. Bateson's work laid the foundation for understanding how certain social behaviours evolve not linearly, but in spirals of amplification. Later thinkers, such as David Graeber and David Wengrow in 'The Dawn of Everything', extended the idea to macro-historical processes, arguing that entire societies often define themselves by rejecting or opposing the traits of their neighbours. Athens and Sparta, for example, developed contrasting political and social systems—democracy versus militaristic oligarchy—not in isolation but through a kind of cultural rivalry. Similarly, indigenous groups

along the Pacific Northwest and in California maintained distinct models of hierarchy or egalitarianism, shaped in part by mutual differentiation. The value of schismogenesis as a conceptual tool lies in its adaptability. It has been applied to a range of fields—from resource management to international politics. In ecological conflicts, such as overfishing or predator control, stakeholders often fall into escalating cycles of blame and reaction. In modern geopolitical strategies, schismogenic tactics have been used to deepen divisions within foreign societies. Scholars have observed, for instance, how disinformation campaigns exploit social fractures to weaken institutional trust. In such cases, conflict is not merely accidental; it is cultivated through reinforcing oppositions. Bateson also noted that interpersonal communication is susceptible to schismogenesis. Misunderstandings between people with different conversational norms can escalate unintentionally. If one person speaks loudly and the other responds by withdrawing, both may intensify their style in ways that further misalign. Even in silence, cycles of withholding can mirror the same dynamic—what Bateson called systems of mutual inhibition. Schismogenesis, then, is not a theory of conflict, but of pattern formation. It shows how behaviour, when mirrored or contrasted repeatedly, can create unintended rifts—social, cultural, psychological, or political. Bateson's insight was to recognise that to prevent the breakdown of communication, systems need rituals, frames, or practices that interrupt these spirals before they harden into permanent division.

Ecological intelligence

Gregory Bateson's contribution to ecological thought lies not in environmental science per se, but in his radical rethinking of how language and knowledge shape human interaction with the natural world. In 'Gregory Bateson's Contribution to Understanding the Linguistic Roots of the Ecological Crisis[126]', C.A. Bowers explores how Bateson's ideas challenge the deeply embedded Western belief that language is a neutral tool for transmitting objective information. Bateson disrupts this model by showing that the way people speak, think, and frame the world is already steeped in metaphorical assumptions—assumptions that often reinforce the very habits contributing to ecological collapse. At the heart of Bateson's critique is the recognition that knowledge systems are recursive: the frameworks people use to understand the world are themselves products of past patterns of thought. These patterns persist not because they are true, but because they are self-reinforcing. Much of modern rationality is structured by conceptual metaphors that originated in historical moments vastly different from the present ecological reality. Language, far from being transparent, functions as a map—and as Bateson famously insisted, the map is not the territory. One of Bateson's core insights is his definition of information as 'a difference that makes a difference'. This reframes understanding from the transmission of facts to the perception of change, connection, and contrast. Information is not static; it emerges in the relationship between parts of a system, be it ecological, cultural, or interpersonal. Recognising this relational structure is essential for what Bateson called 'ecological intelligence'—a way of thinking that perceives systems, interdependencies, and long-term consequences, rather than isolated facts or short-term gains. Language plays a crucial role in either supporting or obstructing ecological intelligence. Most linguistic systems, according to Bateson, smuggle in values and assumptions from their historical origins—particularly those emphasising separation, control, and domination. Words like 'progress', 'freedom', or 'growth' appear value-neutral, but they often encode anthropocentric and exploitative worldviews. These metaphors subtly encourage an extractive relationship with

[126] Bowers, C.A. (2010) Gregory Bateson's Contribution to Understanding the Linguistic Roots of the Ecological Crisis. Cultural and Ecological Dimensions of Language and Thought.

nature and one another. Bateson's theory of the 'double bind' further illustrates how individuals—and entire cultures—can become trapped in contradictory messages. People are told to value sustainability but live in economies that reward consumption. They are asked to protect nature while participating in systems that destroy it. These tensions cannot be resolved by technical fixes alone because they originate in the underlying logic of the language and epistemologies used to frame the problem. To break these cycles, Bateson advocates what he calls 'Level III learning': a transformative form of learning that questions the very premises on which thinking is based. This kind of learning requires a shift from individualistic to systemic perception, from manipulation to participation, from control to awareness. It is not just about knowing more, but about 'knowing differently'. By rethinking language, metaphor, and the structure of knowledge, Bateson's work invites a reorientation of how humans understand their place in the world. It is not merely a matter of better policy, but of deeper perception—of learning to see and speak in ways that honour connection over control.

Epistemology of the sacred

In 'Angels Fear: Towards an Epistemology of the Sacred[127]', Gregory Bateson and Mary Catherine Bateson explore how knowledge, communication, and meaning are embedded not only in words but in relationships, patterns, and metaphor. The book's opening metalogue, 'Why Do You Tell Stories?', is more than a conversation between father and daughter—it is an exercise in epistemology itself, a model for how people come to know the world through stories, symbols, and layered exchanges. At the heart of this exchange is the daughter's playful yet probing question: why does the father rely so heavily on stories from his own life, particularly the repeated tales of animals in zoos or abstract examples, rather than personal memories? The father replies that such stories are not truly about himself. They serve as lenses—vehicles to explore ideas about how humans signal intent, how organisms establish play, and how communication always contains metamessages. The otter, the shell, the spinal curve—all become metaphors. In Bateson's world, metaphor is not a flourish added to fact but the primary mode of understanding relationships. The structure of meaning is inseparable from the story that carries it. What unfolds in the metalogue is a spiralling dialogue about logical types: talking about play, then talking about talking about play, and so on. This recursive movement is not an intellectual game but a core principle of how knowledge is structured. The daughter pushes her father to admit that even his abstractions are rooted in relational contexts. Without grounding in particularity, the higher layers collapse. As she puts it, 'you can't talk about talking unless you're grounded in something real'. The father concedes yet insists that the 'real' being discussed is not tangible like pigs or coconut palms—but patterns, relationships, the ideas of things. Throughout the dialogue, Bateson argues that meaning cannot be separated from the context of its expression. Even a professor's tone while teaching mathematics might carry messages of dominance or nurturance. Likewise, Konrad Lorenz's movements as he mimics geese while lecturing are not merely performative but embody the relational structures he is describing. Language operates on multiple levels, and understanding it requires an awareness of these shifts between content and frame, signal and metamessage. Bateson's deeper point is that all knowledge is situated, relational, and metaphorical. The way organisms grow, the shape of a conch shell, or the spiral of a spinal cord all carry their own stories—biological histories encoded in form. Humans, likewise, are shaped by recursive processes: learning, learning to learn, and learning about learning itself. These loops, rather than linear chains of cause and

[127] Bateson, G. & Bateson, M.C. (1987). Angels Fear: Towards an Epistemology of the Sacred. New York: Macmillan.

effect, form the structure of the sacred. For Bateson, the sacred is not an external domain removed from thought or science. It arises from recognising the complexity and interdependence of systems. In this sense, epistemology is sacred when it respects the whole—not by flattening difference, but by acknowledging the layered, recursive, and metaphor-laden nature of understanding.

Biology with meaning

In 'Bateson: Biology with Meaning[128]', Brian Goodwin revisits Gregory Bateson's enduring vision of life as a pattern of relationships, shaped not just by physical processes but by meaning. The essay proposes that modern biology is beginning to catch up with Bateson's holistic and relational thinking. Far from being a mere blueprint, DNA is now understood less as a script and more as a set of instructions that organisms interpret contextually—like language, full of nuance, ambiguity, and creative possibility. At the centre of this shift is the realisation that genetic material does not operate in a vacuum. Rather than rigid determinism, life is defined by interpretation. The same gene can be read differently depending on cellular context, environmental signals, or developmental timing. This dynamic process—seen in phenomena like alternative splicing or the role of so-called 'junk DNA'—resembles the way meaning is shaped in human communication. Organisms do not simply react; they respond, selecting what matters from a sea of possibilities. In this way, biology becomes semiotic: a living language rather than mechanical code. Goodwin argues that Bateson's contribution lies in rejecting the artificial boundary between nature and culture. For Bateson, humans are not exceptions in nature but part of its unfolding grammar. Our myths, cities, and technologies emerge from the same generative principles that govern the growth of trees, the movement of flocks, or the rhythms of ecosystems. In both biological and cultural systems, patterns of self-organisation recur. These patterns—often fractal, recursive, and non-linear—point to an aesthetic and functional unity across scales. Fractals are one example. Branches of lungs, trees, rivers, and even urban roads echo each other. These recurring forms reflect more than efficiency; they reflect an underlying coherence. Bateson would say they embody the 'pattern that connects'—a phrase he used to describe the deep structures linking life, mind, and evolution. In this sense, a city and a coral reef are not opposed, but variations on a theme, both telling stories about coherence, resilience, and adaptation. What sets Bateson apart, and what Goodwin emphasises, is the role of 'meaning' in evolution. Not just survival of the fittest, but communication, feedback, and shared structure—factors that cannot be measured without reference to context. In Bateson's world, a system must be understood in terms of its relationships and relevance. Life, then, is not reducible to function alone but expresses purpose and story through its form. To illustrate this, Goodwin draws on the Orphic Trinity—Chaos, Gaia, and Eros—archetypes that embody the interplay of randomness, order, and desire. These are not mystical metaphors but attempts to name the creative forces that structure both life and thought. Bateson believed that seeing the world this way—through the lens of pattern, relation, and meaning—was not merely poetic but necessary. Without it, we risk misunderstanding life as a set of disconnected parts rather than a web of living intelligence.

3.2. Daniel Dor

(Imagination engineered: The social origins of language)

[128] Goodwin, B. (2007). 'Bateson: Biology with Meaning', in Bateson: A Legacy for Living Systems, ed. N. C. G. Smith. Springer.

'First we invented language. Then language changed us… The specific function of language is the instruction of imagination: unlike other systems of communication, language allows speakers to instruct their interlocutors in the process of imagining the intended experience'.
— Daniel Dor, The Instruction of Imagination

Biology, media, and language

In 'The Instruction of Imagination: Language as a Social Communication Technology[129]', Daniel Dor offers a bold rethinking of what language is and how it functions—not just as a system of grammar or symbols, but as a social tool that allows humans to share imagined experiences. A professor of communication at Tel Aviv University and a political activist, Dor blends linguistics, media theory, and evolutionary biology to craft a theory of language that places communication at the centre of human evolution. At the heart of Dor's model is the idea that language is a 'communication technology', built collectively by humans over generations to instruct one another's imagination. Unlike gestures or emotional cues, which rely on shared perception in real time, language enables people to describe things not present—memories, plans, fictions, ideas. It allows a speaker to map their own mental experience into a symbolic form that listeners can reconstruct in their minds. In this sense, language is not just a set of rules, but a system designed to transfer subjective experiences between individuals. Dor departs sharply from the dominant Chomskyan model, which treats language as an innate cognitive system primarily concerned with syntax. Instead, he argues that language emerged through cultural innovation, long before the genetic adaptations that might later have made it easier to acquire. This reversal—putting culture before genes—draws on his work with evolutionary biologist Eva Jablonka, proposing a model of gene–culture coevolution in which human communication technology evolved as a shared social achievement first, with biology adapting in response. A central mechanism in Dor's theory is 'experiential mutual identification': the human ability and desire to align inner experiences through interaction. Early humans, according to Dor, developed increasingly complex ways to signal intentions and perceptions. These communicative efforts gradually shaped what he calls the 'symbolic landscape', a collective space of shared meanings and references that individuals navigate and reshape through every act of communication. Language, then, becomes not just a medium but a medium within media. Like print, radio, or digital platforms, it is a technology embedded in culture, subject to its norms, power dynamics, and patterns of transmission. Dor suggests that language evolves alongside other communication tools, each shaping and reflecting the symbolic world people inhabit. In this way, language is not housed in the individual brain but in the network of relationships that sustain and transform it. Dor's theory has resonated with thinkers across disciplines. Philosopher Daniel Dennett praised it for moving beyond static models of linguistic structure. Literary scholar Brian Boyd saw it as opening a new frontier of research. Linguist Andrzej Pawelec suggested it might shift the field away from narrow cognitive frameworks and toward a more socially grounded understanding of language. Dor's work invites a simple but profound reconsideration: that language is not a product of the mind alone, but a social invention—a shared, evolving technology that allows people to imagine together.

[129] Dor, D. (2015). The Instruction of Imagination: Language as a Social Communication Technology. Oxford University Press.

Language as innovation

In 'The Mind at Work: Daniel Dor on Language as Innovation[130]', Anthony Wing Kosner explores Israeli linguist Daniel Dor's compelling theory that language is not merely a cognitive system but a socially constructed technology—one that fundamentally reshaped human evolution and continues to drive innovation. Far from being a passive vessel for communication, Dor argues, language is humanity's most important invention: a tool designed to bridge experiential gaps and coordinate collective imagination. Dor challenges the traditional linguistic paradigm established by Noam Chomsky, which views language as a hardwired, universal grammar rooted in individual cognition. In contrast, Dor insists that language is not located in the brain of any single speaker but exists between people, in the social fabric of interaction. It is a cultural artefact, built cooperatively over generations, constantly adapting to the needs of those who use it. 'First, we invented language, then language changed us', he observes, underscoring the reciprocal relationship between cultural innovation and biological adaptation. A key part of this transformation, Dor argues, lies in language's ability to communicate what is not present—to describe imagined experiences and abstract concepts. Unlike earlier forms of communication based on direct reference—such as pointing or mimetic gestures—language lets speakers encode their inner world in symbolic form and guide listeners to reconstruct it. This ability fundamentally altered how humans think, plan, and collaborate. But Dor is quick to point out that language is not neat or ideal. Its true nature, he suggests, is found in its 'messiness'—the hesitations, corrections, misunderstandings, and adjustments that make up real-world conversations. Far from being a flaw, this imperfection is the source of language's strength. In fact, it is the adaptability of language—its ability to work despite gaps, ambiguities, and misalignments—that fuels innovation. Conversations succeed not because they are perfect, but because they are dynamic, improvisational, and responsive. This dynamism is most visible in diverse teams and high-stakes dialogue. Dor likens innovation in such environments to jazz improvisation: structured yet unpredictable, collaborative yet rooted in individuality. The key, he argues, is the effort to bridge experiential differences—to meet others across gaps in background, culture, and perspective. Innovation, in this view, is not the product of solitary genius, but of shared attempts to align divergent understandings. Dor's collaboration with evolutionary biologist Eva Jablonka adds another layer to this theory, suggesting that language emerged from a deep cultural need to coordinate understanding, and only later shaped the biological evolution of our species. This culturally driven model of language evolution reverses the traditional view that genes lead and culture follows. As digital platforms reshape communication, Dor warns of what is lost—subtle cues, shared space, and non-verbal signals—but also acknowledges what is gained: broader participation, new rhythms, and evolving lexicons. Even in fragmented settings, language retains its function—if people commit to listening, adjusting, and collaborating.

The social origins of language

In 'The Social Origins of Language[131]', edited by Daniel Dor, Chris Knight, and Jerome Lewis, language is redefined not as an isolated cognitive function but as a fundamentally social invention—one shaped by collective effort, cooperation, and cultural transformation. Rather than springing from a sudden genetic mutation or an abstract mental module, language, they argue, arose from the deep social and political complexities of early human life. The shift away

[130] Kosner, A. W. (2020). The Mind at Work: Daniel Dor on Language as Innovation. Medium.
[131] Dor, D., Knight, C., & Lewis, J. (eds.) (2014). The Social Origins of Language. Oxford University Press.

from Chomsky's model of innate 'I-language'—a private, internal computational faculty—toward a view of language as 'socially constructed' marks a turning point in the study of its origins. Dor and his co-editors propose that language evolved not in isolation but in the dynamic space between people: a medium for instructing imagination, built through cooperative interaction. It was not something humans were simply born with, but something they 'learnt to build together', slowly, over generations. At the centre of this theory is the idea that social behaviour can precede and even direct genetic adaptation. In evolutionary terms, humans first began using rudimentary forms of symbolic communication—gestures, rituals, shared attention—and only later did biology catch up. This challenges older gene-first models and places culture, cooperation, and shared intentionality at the forefront of the story. In other words, humans did not evolve language because their brains were ready for it—they evolved language because their relationships demanded it. What made this possible, the authors argue, was an unprecedented level of trust and interdependence. Early humans had to overcome enormous social barriers—dominance hierarchies, competition for resources, and deep-rooted mistrust—to create stable communities. Shared childcare, communal hunting, fire-making, and musical rituals all played a role in fostering emotional bonds and social synchronisation. These practices did not just help people survive—they created the conditions for symbolic communication to flourish. Ritual stands out. Far from being a by-product of language, ritual may have preceded it, laying the groundwork for symbolic meaning. By creating shared experiences of emotion, rhythm, and narrative, ritual helped individuals align their perceptions and intentions. Ritual gave early humans a space to practice trust—and in doing so, made language possible. This volume also draws on insights from primatology, showing that apes already use intentional gestures and audience-sensitive calls. While these do not constitute language, they reveal the roots of communicative intent. Language emerged not from a clean break with the animal world, but from an evolutionary continuum. The final sections explore how, once established, language became a cultural force of its own. It restructured human cognition, enabling imagination, episodic memory, and abstract reasoning. It also diversified into countless forms, shaped by culture, environment, and history. What began to bridge experiential gaps became the foundation of human society.

The instruction of imagination

In 'The Instruction of Imagination: Language as a Communication Technology[132]', Daniel Dor proposes that language is not merely a mental capacity but a collective invention—society is first and most influential communication tool. Rather than treating language as a biological trait stored in the brain, Dor presents it as a socially engineered technology developed to help humans navigate the deep chasm between individual experiences. At its core, this book redefines language as a system for instructing the imagination, allowing people to guide others in mentally reconstructing experiences that cannot be directly shared. Human communication faces a fundamental challenge: the 'experiential gap'. Each person experiences life subjectively, shaped by memory, perception, and emotion. No one can feel what another feels or see the world exactly as another sees it. Most systems of communication—like gestures, facial expressions, or images—can only narrow this gap by presenting shared stimuli. They work best when the message is obvious or immediate. Language, however, goes further. It offers a structure that lets speakers describe distant events, inner thoughts, or abstract ideas—guiding listeners to mentally assemble and interpret those scenes themselves. Dor's central idea is that

[132] Dor, D. (2015). The Instruction of Imagination: Language as a Communication Technology. Oxford University Press.

language works not by transferring thoughts but by providing 'skeletal instructions'. Words and grammar serve as scaffolding for the listener to construct imagined experiences using their own memories and cognitive resources. Unlike systems that show or point, language instructs: it says not 'look at this', but 'imagine this'. This strategy gives language a functional uniqueness. It is why people can talk about gods, governments, fictional stories, or the future—things that may never be seen or touched. This instructive function requires a shared social infrastructure. Language relies on a 'symbolic landscape'—a collectively shaped web of meanings that speakers draw from and contribute to. It also depends on a communication protocol: implicit rules and norms that help people coordinate speech and imagination. These components are developed socially, not individually, and they evolve as societies change. Crucially, Dor frames the evolution of language as a technological process. It did not emerge in a single leap but through gradual refinements. Early humans likely used experiential forms of communication—pointing, mimicking, gesturing—before developing instructive signals that allowed for deeper cooperation. The shift demanded increasing trust, especially as humans began to communicate about things unseen or uncertain. Over time, simple signals became structured sentences; shared meanings became complex grammars. The evolution of language intertwined with the evolution of cognition, emotion, and social life. Dor's model also implies that the true power of language lies in its imperfections. Real communication is messy. People misunderstand, correct, improvise, and repair their words as they go. This fluidity is not a flaw but a sign of adaptability. Language thrives not because it is precise, but because it allows users to work through their differences and adjust to each other's imagination. In viewing language as a social technology that instructs imagination, Dor offers a unifying theory that bridges cognitive science, linguistics, anthropology, and communication. It suggests that what sets humans apart is not just the ability to speak, but the ability to guide one another through shared stories, imagined realities, and the open-ended spaces of thought.

Language and its speakers

In 'The Instruction of Imagination', Daniel Dor explores how language emerged not as a static, innate faculty but as a technology gradually built by humans to solve a fundamental problem: the challenge of communicating subjective experience. The absence of fossilised traces means that understanding language evolution demands a cross-disciplinary effort—from linguistics and anthropology to neuroscience and philosophy. What unites these approaches is a shared goal: to understand how language came to define what it means to be human. The central question is not only how language began, but what kind of thing it is. Chomsky's view of language as an inborn, infinite system has dominated linguistics for decades but fails to explain how such a capacity could evolve through natural selection. Evolution favours function and adaptability. A system defined by abstraction, disconnected from practical use, cannot easily be traced back to the needs and pressures of early human life. Dor argues that this paradox pushed many researchers toward a different view: language as a tool that evolved in tandem with its users, shaped by and shaping the needs of cooperation, memory, and social complexity. Reframing language as a communication technology shifts the question. Instead of asking how a linguistic 'organ' appeared, the focus becomes: how did early humans, living in small, interdependent groups, come to invent and refine a system capable of instructing others' imaginations? Language did not evolve in isolation. It emerged in the same environment as fire, tools, and social rituals. It developed incrementally—from pointing and mimicry to shared symbols and structured combinations. These early symbolic forms helped humans communicate not just what they saw, but what they remembered, imagined, or planned. Like any technology, language changed over time. It demanded cooperation and introduced new

cognitive pressures. Those better able to understand and use linguistic instructions gained advantages in survival, social cohesion, and planning. Over generations, these pressures fed back into the species' development, a process called 'genetic accommodation'. As language grew more complex, so did the brains of its speakers, leading to a spiral of co-evolution. What made language unique among other communicative systems was its instructive nature. Rather than simply expressing an emotional state or pointing to a visible object, it allowed speakers to offer frameworks for reconstructing experience. It asked listeners not to look but to imagine. This was a radical step. It required a new kind of trust—not just in what someone says, but in their intention to guide you truthfully toward something you cannot see for yourself. Language, then, was not a sudden leap but a long, cooperative project. It emerged from mutual needs, grew through shared creativity, and ultimately shaped the minds and emotions of its users. In this sense, humans invented language—and language, in turn, made humans.

Dark side of imagination

Daniel Dor explores not only how language emerged as a communication technology, but how this powerful invention carried with it a hidden potential: the ability to deceive. As language allowed humans to instruct one another's imaginations, it also created space for manipulation, distortion, and lies. What began as a shared tool for mutual understanding became a double-edged instrument—one that sharpened both cooperation and betrayal. Language is grounded in trust. Every act of communication assumes that the speaker's intention aligns with the listener's expectation of truth. This mutual assumption creates the condition that deception exploits. Unlike simple gestures or emotional cues rooted in the present moment, language opened the door to talking about what is not visible, what has not happened, or what never will. The more language extended beyond the immediate world, the more room it created for invention—for truth and falsehood alike. Dor emphasises that while animals can deceive—through camouflage, mimicry, or distraction—humans took deception to a new level. The invention of language vastly expanded the scope of the possible lie. For the first time, a person could invent entire narratives, cloak intentions in plausible language, and manipulate others without direct confrontation. The imagination, shaped by language, became capable of misleading others with stories that seemed real. The act of speaking no longer required the speaker to show or prove anything. It only required trust. This transformation did not go unnoticed within early human communities. As some individuals grew skilled in deception, others responded with suspicion, critical thinking, and strategies of detection. Thus began an evolutionary arms race: liars improved their techniques—crafting more convincing narratives, controlling their emotional signals, and mastering the nuances of persuasion—while listeners sharpened their instincts, memory, and logical reasoning to expose fraud. In this back-and-forth, the foundations of rhetoric and epistemology were born. Persuasion and scepticism co-evolved. What emerged was a paradox: language made cooperation easier and societies more complex, but it also made betrayal more sophisticated. Those who could shape collective belief through well-placed stories gained power, often creating myths, ideologies, or systems of control. Language, Dor suggests, became a tool not just for sharing truth, but for shaping reality—sometimes to the benefit of all, but just as often to the benefit of the few. Deception in language is not a bug, but a feature—an inevitable consequence of imagination. By giving humans the ability to speak of what is not, language demanded vigilance in separating invention from illusion. The same tool that allowed people to dream, remember, and explain also allowed them to exploit, mislead, and dominate. This dual legacy is built into the very structure of human communication.

Reassembling the puzzle

'The Instruction of Imagination' offers a new vision of language: not a static structure or an internal grammar, but a social communication technology crafted collectively to instruct the imagination. This perspective shifts focus from the internal mechanisms of language to the external relationships it enables—how people construct meaning together across experiential gaps. Language, in this sense, becomes less a product of individual cognition and more an emergent property of interaction, identification, and mutual understanding. Dor's approach brings together disciplines that have long studied language in isolation. By proposing that language's central purpose is to guide the imagination of others, he provides a conceptual framework for uniting cognitive science, social theory, semiotics, and evolutionary biology under one task: understanding how human beings use signs to build shared realities. This reintegration of fragmented linguistic thought mirrors what language itself does—organising and translating private experience into a format that others can grasp, however imperfectly. At its core, language functions in the social domain. It enables communication not by directly transferring thoughts but by building bridges through signs—abstract, socially agreed-upon tools that shape how people talk about, and even experience, the world. Every word carries with it a tension: between the speaker's private experience and the social structure that gives the word its meaning. Language is thus always negotiating between the personal and the public, the analogue and the categorical. This tension explains why communication can never be fully precise, and why it often reveals as much about society as it does about individual thought. Despite the seeming stability of grammar or semantics, Dor reminds us that language is not a closed system. It changes constantly, shaped by new experiences, needs, and constraints. Its norms are formal only in a limited sense: not rigid rules but practical conventions developed through interaction. This openness explains the proliferation of languages, dialects, and registers across the globe. Each represents a unique response to the challenges of social life and imagination. Language, in Dor's account, is not only creative but dangerous. It enables cooperation, but also deception. It strengthens bonds yet can deepen divisions. It equips humans with the imaginative power to invent and share complex ideas, yet it binds that freedom to socially approved forms. Language gives power to those who can command imagination—leaders, storytellers, propagandists—and remains dependent on trust, which is always vulnerable to manipulation. Understanding language, then, requires a shift in perspective. It is not a fixed code or a mental organ, but a living, evolving phenomenon. It is energetic—something people do together, not something they merely possess. In this view, the study of language becomes a study of people: how they relate, imagine, and co-create the world.

From experience to imagination

In 'From Experience to Imagination: Language and Its Evolution as a Social Communication Technology[133]', Daniel Dor advances a compelling rethinking of how language came into being. He argues that language should not be viewed simply as a biological adaptation or an individual cognitive mechanism, but as a social technology—gradually invented and refined by early humans to solve a specific problem: how to instruct one another's imagination. Before language, human communication depended heavily on shared experience. People could signal danger, point to food, or mimic basic actions, but they could not describe events that were not immediately visible or recreate experiences that only they had witnessed. This limitation became increasingly constraining as human societies grew more complex. At some

[133] Dor, D. (2016). From Experience to Imagination: Language and Its Evolution as a Social Communication Technology. Elsevier.

point, pre-linguistic humans—likely 'Homo erectus'—found themselves needing to communicate what could not be directly seen or shown. They began to experiment with symbolic systems that could stand in for absent realities. This marked the birth of language—not as a pre-wired instinct, but as a creative, collective solution to a shared problem. According to Dor, language was not built all at once. It developed incrementally through trial and error, shaped by social pressures and reinforced by communicative success. Once early signs and vocalisations began to function reliably as instructions for imagining shared ideas, a feedback loop emerged. The more useful language became, the more society demanded it. As communication became richer and more complex, individuals who could better navigate this emerging system—through clearer articulation, sharper memory, or deeper empathy—began to thrive. Over generations, these skills led to partial genetic accommodation, favouring those with the physiological and cognitive capacities to speak, listen, and imagine with greater precision. Crucially, this evolutionary path did not produce a universal, uniform linguistic ability. Dor emphasises that language emerged through collective invention, not from a sudden biological mutation. Human beings co-evolved with language as they used and adapted it, meaning that linguistic aptitude—like literacy or musicality—is distributed variably across individuals and communities. This theory shifts the longstanding debate about the origin of language away from isolated minds and fixed grammars, toward a more grounded and dynamic understanding of communication. It presents language as a system that began outside the mind, in social interaction, and only later came to reshape human cognition from within. It also reframes the 'evolutionary bottleneck' not as a mystery to be solved by invoking innate universals, but as a puzzle that makes sense only when language is seen as an evolving tool for bridging mental worlds. By repositioning language as a socially engineered technology for imagination, Dor opens new paths for unifying linguistic theory with anthropology, evolutionary biology, and communication studies. The result is not only a novel hypothesis about the past, but also a richer way to understand how people continue to build meaning together in the present.

The role of the lie

The capacity to lie is often viewed as a disruptive side-effect of language—an unfortunate loophole in a system designed for cooperation. Yet in 'The Role of the Lie in the Evolution of Human Language[134]', Daniel Dor turns this view on its head, arguing that deception was not an accidental consequence of linguistic evolution, but a central driver of it. Language, far from being a purely honest medium, developed precisely because it enabled speakers to go beyond what could be immediately verified—to instruct others' imaginations, to speculate, and crucially, to fabricate. Dor builds on his earlier work in which he defines language as a 'social communication technology'. Unlike the fixed, present-oriented signalling systems of animals, human language can conjure possibilities far removed from direct experience. It enables people to share not just facts, but fictions, opinions, desires, and speculations. This imaginative capacity is what makes language powerful—and dangerous. The ability to lie, in this view, is not a flaw in the system, but a feature that shaped its growth. Language freed humans from the need to verify every claim through shared perception. This made deception easier. A person could say, 'There's a lion behind the hill', or 'The spirits told me I should lead', and unless others could check, they had to decide whether to believe. Trust thus became a fundamental ingredient of linguistic communication. But trust also opened the door for exploitation. The very conditions that make communication effective—shared codes, mutual understanding—also make it vulnerable. Dor suggests that language and lying entered a kind of evolutionary spiral.

[134] Dor, D. (2016). The role of the lie in the evolution of human language. Elsevier.

As some individuals became better at bending truth to their advantage, others became more skilled at detecting falsehoods. This ongoing tension shaped not only linguistic development but also social and cognitive evolution. Imagination, memory, empathy, and suspicion—traits essential to both effective lying and detecting lies—were refined through this dynamic. Importantly, deception was not only antisocial. Dor points out that not all lies are malicious. Many serve social purposes: smoothing interactions, avoiding conflict, preserving harmony. The rise of rhetorical skill, storytelling, and even politeness are tied to the same capacity that enables lying. These cultural practices demonstrate that the line between deception and communication is not always clear-cut. Language is both a bridge and a mask. In this light, the lie is not simply a threat to linguistic order—it is part of the reason that order became necessary in the first place. The evolution of grammar, logic, and narrative structure can be seen as attempts to manage the tension between truth and fiction. What emerged was not a pure system of truth, but a flexible and adaptive tool capable of navigating a world where motives are hidden and appearances deceive. Language, Dor concludes, is as much a product of deception as it is of cooperation. It grew not despite lies, but because of them.

The emergence of lying

In 'The Instruction of Imagination', Daniel Dor proposes that lying was not an original feature of language but emerged gradually once language began to move beyond high-stakes survival contexts where honesty was essential. In its earliest phases, language evolved to instruct imagination in situations of epistemic dependency—contexts where the speaker and listener depended on each other's accurate descriptions of experience. Under such conditions, deception was unlikely; trust was a matter of survival. But as language entered more social and less immediately vital domains, the tight coupling between communication and trust loosened. Humans, already capable of mimetic deception through gesture and emotion, began to realise that language could do more than represent reality—it could distort it, suggest alternatives, and create illusions. The lie, however, demanded a new kind of imagination. Unlike honest communication, which merely replays what is known, lying requires constructing an entirely false world in the listener's mind. The liar must know what is true, imagine what is false, and anticipate how the lie will be interpreted and believed. This cognitive leap fundamentally changed the dynamics of language. Not everyone adopted deception equally. Some individuals began to explore its potential; others remained naive or unsuspecting. Variability in both lying and lie-detection introduced new social configurations. Dor outlines three relational types that emerged: in Type A, dominant liars exploited less discerning listeners; in Type C, powerful lie-detectors curtailed the success of unskilled liars; and in Type B, an arms race emerged between equally skilled liars and detectors. These interactions set the stage for more complex communication systems, where truth and fiction coexisted and competed. As lying became more common, social hierarchies amplified its effects. High-status individuals could lie with fewer consequences, manipulating others or protecting their own interests. Low-status individuals, meanwhile, may have turned to strategic half-truths or flattery to avoid punishment. Small lies became tools of survival. Honest alliances emerged within groups, especially for vital information, while deception was often reserved for interactions with outsiders or rivals. Crucially, Dor ties this development to the structure of early human communities. As societies grew—around 150 individuals, according to Dunbar's estimate—language was forced to adapt. Communication had to bridge not only physical distances but also social absences. Gossip became central. It allowed people to talk about others who were not present, managing reputation and cohesion. But it also introduced uncertainty: Was the gossip true? The rise of indirect communication brought a corresponding rise in deception. Over time, the very

imagination cultivated by honest language use allowed for counterfactual speech. As people became skilled in imagining what others said, did, or might do, they also became able to construct and detect lies. Lying thus did not disrupt language—it completed it, driving its complexity forward. Culturally, deception fed symbolic life. Myths, fictions, and shared illusions are built on the same imaginative faculties as lies. In societies where lying is feared, pretend-play and storytelling are often restricted. In this way, the fear of deception can limit imagination itself, revealing how closely language, lying, and cultural expression are entwined. Lying also shaped human cognition. To deceive linguistically, one must build plausible false worlds and anticipate how others will interpret them. To detect lies, one must track inconsistencies, read intentions, and reason about hidden meanings. These pressures fostered higher-order thinking, empathy, and flexible imagination—traits that now define human intelligence. Lying, then, was not an accident in the story of language.

3.3. Robin Dunbar

(Vocal grooming: Gossip, groups, and the limits of connection)

'Gossip is the social glue that binds our large-scale societies together—it's not frivolous; it's essential'.

— Robin Dunbar, Grooming, Gossip and the Evolution of Language

Grooming and gossip

Before language, primates bonded through grooming—touching, picking, and stroking that reinforced trust and connection. Grooming was not only hygienic but also political, emotional, and social. It resolved tensions, affirmed alliances, and reminded individuals of their place in the group. But as group sizes expanded, grooming everyone individually became unfeasible. In 'Grooming, Gossip, and the Evolution of Language[135]' Robin Dunbar's hypothesis is that humans solved this problem by replacing physical contact with sound—vocal grooming. Talking, he argues, became the new way to maintain social bonds. In his book, Dunbar suggests that the origin of language lies not in the need to describe the world or share technical knowledge, but in the need to keep track of relationships in ever-growing groups. Words, at their evolutionary root, are not about facts—they are about people. Gossip, the first true use of language, allowed early humans to manage their social networks more efficiently. Unlike grooming, which is limited to one-on-one contact, gossip could be shared with several listeners at once, making it vastly more efficient. It kept track of who could be trusted, who had cheated, who was rising or falling in status. But this innovation came at a cost. The human brain—especially the neocortex—expanded to process this social information, and it became one of the most energy-hungry organs in the body. This shift was not about expressing abstract thoughts or cosmic ideas; it was about managing relationships. Language, in its early days, was not the voice of reason or philosophy—it was social glue. Most human speech today still revolves around social matters. Studies show that two-thirds of conversation is devoted to relationships, reputations, and social alliances. This mirrors grooming among monkeys: repetitive, intimate, sometimes seemingly pointless, but always socially significant. In both cases, the content often does not matter as much as the connection it sustains. Dunbar highlights that language became a new terrain for social behaviour: it allowed people to assert dominance

[135] Dunbar, R. (2011). Grooming, Gossip and the Evolution of Language. Faber & Faber.

without fighting, apologise without submission, spread reputations without direct observation. It also introduced risks: lies, manipulations, exaggerations. But these, too, became part of the game. Language gave people the tools to manage not only reality but appearances. Language also transformed identity. Accents, dialects, and shared vocabulary became signs of belonging. One speaks like a group or does not. Language divides just as much as it unites. In large societies, language can sort people by class, tribe, or allegiance as easily as by meaning. Although no other animal species developed anything close to human language, Dunbar's approach emphasises continuity, not rupture. Language did not appear suddenly as a tool of reason—it grew gradually out of the emotional, social needs inherited from primate ancestors. Language may be humanity's most remarkable tool, but its evolutionary origins are intimate and ordinary. Not logic, but bonding. Not theory, but gossip. What sets humans apart is not that they talk—it is what they talk 'about'.

First words

Language did not arrive all at once, nor was it born from a single invention. According to Robin Dunbar, its roots lie in the basic social needs of early human groups, particularly the challenge of maintaining relationships as group sizes expanded. Dunbar suggests that vocal communication evolved as a solution to the time limitations of manual grooming, which primates use to bond and reinforce social alliances. As hominin groups grew beyond the sizes manageable by grooming alone, a new, more efficient system was needed—language began to gossip, to manage social life through sound. But what form did these first vocal interactions take? One hypothesis is that early humans used simple calls or vocalisations—perhaps like those of our primate relatives—that gradually became more structured. These might have started as emotionally charged noises and evolved into shared signals for objects, actions, or social relationships. Other theories suggest that gestures, perhaps even pantomimes, were a precursor to spoken language, supported by shared neural systems involved in tool use and movement. A third idea, the 'song hypothesis', holds that music-like vocalisations were the foundation, carrying emotional resonance that later became symbolic meaning. Each possibility has limitations. Gestures require visual contact and do not travel far. Songs tap into emotion but lack the clarity needed for detailed communication. Primate-style calls are limited in variety. Yet all of them highlight one fact: language likely developed gradually, pieced together from different cognitive and physical capabilities already in place. The ability to breathe rhythmically, coordinate tongue and lip movement, and manage pitch and tone—these were prerequisites that slowly came together. Vocal language offered specific advantages. Sound travels in the dark, across obstacles, and through space. Unlike gesture, it can reach multiple people at once. And, critically, it can blend emotional expression with referential meaning. Some primates already display turn-taking, symbolic calling, and vowel-like sounds, suggesting that the leap to early proto-language may not have been as abrupt as it seems. Neurologically, language recruits both hemispheres of the brain—left for structure and logic, right for emotion and rhythm. Early humans likely used both aspects, shaping a mode of communication that was emotionally resonant but also precise enough to convey social and environmental information. The first words, then, were probably neither pure song nor pure sign, but a hybrid form emerging from a need to share, warn, flirt, plan, and bond. Language was a social technology before it was a cognitive one. It solved the problem of too many people and not enough time to touch them all. From those first murmurs and signs, humans built the powerful tool we now take for granted: an ever-evolving bridge between minds.

Babel's legacy

Language, perhaps the most distinctive human trait, also proves to be among the most volatile. Unlike other evolutionary adaptations, it rarely stands still. Over time, languages not only change but splinter, sometimes so quickly and dramatically that descendants of the same tongue can become mutually incomprehensible in a few short centuries. Robin Dunbar, in 'Grooming, Gossip, and the Evolution of Language', highlights this restless churn, noting how Latin fractured into French, Italian, and Spanish in just two millennia, or how English has evolved so fast that Chaucer's Middle English already reads like a foreign dialect. Why does this happen? If language evolved to promote cohesion and communication, why does it so easily slide toward division? One explanation is geography. As early human populations spread across continents, they often became isolated by mountains, rivers, deserts, or sheer distance. This physical separation meant speech patterns developed in parallel, slowly drifting apart. Over generations, dialects diverged, and once-communal tongues turned into separate languages. But isolation alone does not tell the whole story. Cultural and social factors add to this divergence. Language, besides being a communication tool, also carries deep symbolic weight. It signals identity, belonging, even resistance. New dialects often emerge to mark political separation or emphasise cultural uniqueness. In some cases, groups deliberately preserve or create linguistic differences as a form of boundary-making—subtly or overtly declaring who they are by how they speak. Yet language does not just drift; it innovates. People experiment, play with words, coin phrases, and shift pronunciations. These micro-changes accumulate and spread unevenly through a community. The process is subtle but inexorable. Add in migrations, intergroup mixing, or cultural revolutions, and the pace of change accelerates. The quest to understand how all these tongues relate has led linguists to search for language families and ancestral roots. Beginning in the 18th century with Sir William Jones, scholars noticed uncanny similarities between distant languages like Sanskrit, Latin, and Greek. This insight laid the groundwork for the reconstruction of the Indo-European family, believed to have sprung from a common language spoken around 5,000–6,000 BCE in Eurasia. Through comparative linguistics, other possible superfamilies were later proposed—Nostratic, Dene-Caucasian, even a hypothetical 'proto-World'. But going back beyond 6,000 years becomes speculative. Too much time erases too many clues. Sound shifts, semantic drift, and syntactic changes muddy the waters, making deep reconstruction difficult if not impossible. Still, the similarities that remain—like shared structures, vowel patterns, or root words for body parts and basic actions—suggest a common mental blueprint for language. So, if the mythical Tower of Babel did not cause linguistic diversity, what did? Probably a mixture of accident, geography, innovation, and identity. Language is a living thing, and living things evolve. In some ways, fragmentation is the price of flexibility—proof of how language adapts to the needs, environments, and desires of its speakers. And despite this chaotic diversity, the deep structure of language stays constant. All human languages, no matter how remote or exotic, perform the same task: they help people connect. In that sense, Babel's legacy is not confusion but creativity—a reminder that our differences rest on a shared capacity to speak, listen, and understand.

The dynamics of chaos

Language is both humanity's most sophisticated tool and one of its most unpredictable. Despite its purpose as a medium for shared understanding, it fragments relentlessly. There are currently around 5,000 spoken languages, yet over half are expected to vanish within a few generations. As older speakers die and younger ones adopt global tongues like English or Mandarin, we are witnessing a collapse of linguistic diversity on a massive scale. Paradoxically,

while languages disappear, new dialects and variations are constantly forming—suggesting that language is not merely a stable system but a self-replicating, chaotic force. Dunbar explores this dynamic instability and notes that language behaves less like a fixed code and more like a social organism. Every group, from a street gang to a nation, subtly modifies language to express solidarity, belonging, and difference. English, having spread worldwide, now appears in forms as divergent as Jamaican Patois, Nigerian English, and Scottish dialects—many of which are mutually unintelligible. This continual branching suggests language thrives in tension between unification and fragmentation. Dunbar links this instability to migration. Language spreads and changes with human movement. As modern humans migrated out of Africa and across the globe, new linguistic families took shape. Some patterns can be traced—such as Indo-European expansion from the Danube basin, or the Austronesian spread from Southeast Asia to Madagascar and Polynesia. Agricultural revolutions, climate shifts, and later empires shaped the linguistic map further, but the pattern remains: migration stirs the linguistic pot. Yet isolation alone does not account for the rate at which languages change. Social forces play an equal role. Dialects serve as social filters, marking who belongs and who does not. This is not just cultural snobbery; it is an evolved function. Groups that can exclude outsiders prevent exploitation. Rapid dialect change, Dunbar notes, acts like a password system. If you cannot speak the dialect fluently, you are marked as an outsider. Computer models support this. Linguist Dan Nettle simulated language change in cooperative communities. When dialects shifted quickly, it became hard for free-riders—those who took without giving—to integrate. In this view, language's instability is protective. The confusion of Babel was not a punishment; it was a defence mechanism. Kinship also underlies language's evolution. People use dialects to strengthen bonds with those they trust, often kin or kin-like networks. Even in modern societies, terms like 'brother' and 'sister' maintain these symbolic ties. Language preserves identity, filters loyalty, and reinforces emotional bonds. It is not just how people communicate—it is how they signal who they are. Population density accelerates this dynamic. In densely populated regions, like West Africa or the South Pacific, linguistic diversity skyrockets. As groups form tight clusters, their languages splinter more quickly to maintain group identity. Sedentary agricultural life amplified this, making language an even sharper social boundary. Despite its chaos, language remains central to human cohesion. It evolves because people evolve. It fragments not despite its purpose, but because division serves a purpose—creating order, belonging, and meaning within the noise.

Language permeates human culture

Language saturates every part of human culture. It is more than a tool—it is the very scaffolding of our social lives, from storytelling and ritual to science and diplomacy. In 'Grooming, Gossip, and the Evolution of Language', Robin Dunbar argues that language is not a late addition to human progress but a product of our evolutionary history, shaped to serve the needs of early human communities. Long before global societies and digital networks emerged, humans lived in small groups. The mental structures that developed in those settings still guide how people think, interact, and organise life today. This mismatch between ancient minds and modern society creates friction. Language evolved in groups no larger than 150 individuals, where people knew one another personally and communication reinforced trust, empathy, and cooperation. Our brains still expect that level of intimacy and face-to-face engagement. When surrounded by the anonymity of cities or the noise of social media, people often feel disoriented or disconnected. That sense of alienation is not a personal failing—it is a sign that modern environments often stretch our evolutionary design to its limits. Yet, this realisation should not lead to pessimism. The same evolution that built these cognitive structures also endowed

humans with flexibility. Primates in general—and humans especially—are good at adjusting behaviour within constraints. What is needed is not to deny our mental architecture but to design better cultural systems around it. Acknowledging our predispositions helps create environments where people feel more connected and fulfilled. This may involve rebuilding smaller, more meaningful social networks within large-scale societies. Neighbourhoods, cooperatives, clubs, and even tight-knit online communities can replicate the intimacy of early social groups. Shared rituals—like meals, music, or recurring events—also reawaken the bonding power of traditional human gatherings. Even in the workplace, teams function best when structured to mirror the cooperation and accountability found in small communities. Technology, too, can be redirected to serve these needs. While many digital tools isolate or overstimulate, they can also be used to create empathy, bridge distances, and simulate the immediacy of in-person connection—if designed with these priorities in mind. At the same time, education systems can reinforce our adaptive strengths by teaching not just facts, but emotional literacy, storytelling, and flexibility. Human behaviour is not fixed. It emerges from the continuous tension between biology and environment. By recognising our evolutionary baggage and designing around it, people can soften the sharper edges of modern life. Dunbar's point is not that people are trapped by their past, but that they thrive best when present conditions respect deep-seated psychological needs. The future of human flourishing depends not on transcending evolution, but on making peace with it.

How many friends does one person need?

Human morality is often viewed as the pinnacle of civilisation, a fragile contract upheld by laws, customs, and belief systems. But what if its foundation lies not in abstract philosophy, but in our biology? In 'How Many Friends Does One Person Need?[136]', Robin Dunbar explores this idea by tracing the cognitive limits and evolutionary quirks that shape social life and ethical understanding. One of the book's key insights is that moral behaviour—so often thought of as a cultural achievement—has deep evolutionary roots shaped by our brains and the scale of our social lives. Modern neuroscience supports this idea. Brain imaging studies consistently reveal that moral decisions engage specific areas of the brain, such as the insula and the right temporal-parietal junction. These areas are activated when people evaluate fairness, perceive norm violations, or infer the intentions of others. Moral judgments, it turns out, are not just about logic or rules. They are emotionally loaded and socially tuned, shaped by empathy, memory, and the ability to imagine another's thoughts—a faculty known as 'theory of mind'. Theory of mind is central to understanding human ethics. While most animals operate with limited social awareness, humans are capable of fifth-order intentionality: not only do people know what others think, but they know what others think others think, and so on. This recursive thinking makes complex moral reasoning possible. It allows humans to cooperate in large groups, invent legal systems, and construct religious doctrines. Without this depth of intentionality, moral systems would collapse into short-term, one-on-one interactions. Interestingly, the evolutionary journey of morality aligns closely with the growth of the neocortex, especially regions tied to language, memory, and planning. As early humans began living in larger groups, social coordination became essential for survival. Punishing free-riders, rewarding cooperators, and maintaining reputations became collective concerns. Morality—initially a way to manage relationships—eventually crystallised into cultural codes and ethical philosophies. Other

[136] Dunbar, R. (2011). How Many Friends Does One Person Need? Harvard University Press.

primates, like chimpanzees, display what might be considered proto-moral behaviour. They reconcile after fights, show empathy in certain situations, and understand basic fairness. However, they rarely engage in actions that reflect concern for future consequences or unseen observers—two traits common in human morality. Their intentions are limited in scope, and they do not construct symbolic systems to uphold ethical behaviour across time and space. What sets humans apart is not empathy alone, but the scale and structure of moral thinking. Human beings can imagine a god watching over them or feel guilty about a decision that no one witnessed. Such behaviour depends on a highly developed brain and a deep cultural framework. Dunbar's work suggests that this complexity arises not from pure rationality, but from the evolutionary pressures of living in groups just big enough to strain cognitive limits. If morality is indeed a product of biology shaped by social scale, then ethics is not a fixed ideal, but a flexible adaptation. And like all adaptations, it can be nurtured, neglected, or extended—perhaps even beyond our species.

How evolution found God

In 'How religion evolved : and why it endures'(2022) Dunbar is examining religion's origins. The mystical stance of religion has long puzzled scientists and philosophers alike. Why would a species concern with survival and reproduction invent stories about unseen beings, enforce complex rituals, and devote energy to moral codes rooted in supernatural authority? From an evolutionary standpoint, such practices seem inefficient or even detrimental. Yet religion has persisted in every known human society, often occupying a central place in culture. One possible explanation is that religion is not just a cultural artefact—but a by-product of the very same evolutionary forces that shaped language, cooperation, and cognition. Language, as a uniquely human trait, enabled early hominins to communicate across space and time, imagine alternative realities, and coordinate in large social groups. With it came the power of narrative—the ability to explain, persuade, and bind individuals through shared symbols. In this context, God did not descend from the heavens; God emerged from language. The act of naming, storytelling, and invoking unseen forces gave early humans a new kind of authority: the authority of meaning. Religion, then, may have emerged not despite evolution but because of it. Language made it possible to imagine agents who were not present, including those who watched from above. Once people could speak of intentions and minds, it was only a matter of time before they imagined the ultimate mind—one that sees all and judges all. This is not merely myth-making; it is cognitive elaboration on evolved mental capacities. Humans naturally seek patterns, assign agency to events, and prefer meaningful explanations over randomness. These tendencies, once shaped by the need to detect predators or read social cues, gave rise to beliefs in gods, spirits, and fate. Religious ideas offered an adaptive framework. Belief in supernatural punishment, for instance, can deter antisocial behaviour more effectively than human enforcement alone. Groups that believed in moral gods likely outcompeted those that did not—not because their gods were real, but because shared beliefs enhanced trust, reduced internal conflict, and enabled cooperation on a larger scale. Rituals strengthened this bond. Singing, dancing, fasting, and chanting released endorphins and reinforced group identity. These acts were costly but honest signals of commitment—hard to fake and easy to observe. Moreover, religion helped navigate the tension between individuality and group cohesion. While individuals might benefit from cheating or shirking duties, communities thrived when members acted altruistically. By embedding morality in divine command, religion externalised conscience and made moral behaviour a collective imperative. The gods became guardians of social contracts. Cognitively, religion required new levels of mental complexity. Humans had to manage not only their own beliefs but their understanding of others' beliefs—what cognitive

scientists call theory of mind. Higher-order intentionality, such as 'I believe that you believe that God wants us to act morally', allowed for the development of doctrine, authority, and communal identity. Without language and this recursive thinking, religion as we know it would not exist. Thus, religion is not a flaw in human reasoning but a feature of evolutionary intelligence. It grew from the soil of language, imagination, social need, and cognitive sophistication. It bound scattered individuals into moral communities and offered existential comfort in a chaotic world. Evolution did not erase the divine—it invented it.

Social brain, religious mind

In 'Religion, the Social Brain and the Mystical Stance[137]', Robin Dunbar argues that religion evolved to promote social cohesion in large human groups. It began as immersive trance-based rituals and later developed formal doctrines. Modern religions, he suggests, overlay these ancient forms, and the enduring mystical stance explains the recurring emergence of cults and sects within major traditions. The social lives of mammals, especially primates, are full of tension. Individuals often pull in different directions, each with their own goals and interests. This centrifugal pressure, if unchecked, threatens to fragment the group. Among monkeys and apes, this problem is managed through social grooming—a behaviour that not only maintains hygiene but, more importantly, reinforces trust and emotional bonds. Grooming works well in small groups, but it has strict limits. It is time-consuming, requiring one-on-one attention, and as a result, primate groups rarely exceed about fifty members. Humans, however, surpassed this threshold. Though early hunter-gatherer bands remained small, they were embedded in larger, layered structures—bands nested within communities, which themselves formed mega-bands and tribes. These larger units demanded new mechanisms to hold them together. Grooming was no longer enough. Something more scalable was needed. The human brain found a solution. Even though we lost most of our body hair, we did not lose the neurological systems that made grooming so rewarding. Gentle touch still activates endorphin release, creating feelings of calm and connection. But to manage larger groups, early humans had to simulate these effects in other ways. They developed behaviours that triggered bonding chemicals in more people at once—what might be called 'virtual grooming'. Laughter, singing, dancing, storytelling, feasting, and ritual all serve this purpose. They trigger endorphins, synchronise emotions, and foster unity. Unlike grooming, which ties together a pair, these cultural practices can bond dozens or even hundreds at once. Shared laughter or song makes people feel seen, safe, and part of something greater. Watching an emotional story can bind strangers into a temporary kinship through shared empathy and neural resonance. Of all these bonding tools, religious ritual may be the most potent. It engages people physically and emotionally. Rhythmic movement, chanting, shared silence, and symbolic gestures all produce the neurochemical effects of intimacy. Even more, religious experiences often carry a personal intensity akin to falling in love. Many mystics, across cultures, describe their relationship to the divine in romantic terms. God is not just obeyed or worshipped but loved. The mind's ability to imagine what others are thinking—called 'mentalising'—is critical to both religion and social bonding. This ability allows people to build complex ideas about gods: what they want, what they know, and how they judge. Humans can operate at fifth-order intentionality: 'I believe that you think that we both believe that God wants us to act this way'. This is an enormous leap from the second-order mindreading seen in other primates and is crucial for building shared belief

[137] Dunbar, R. (2020). Religion, the social brain and the mystical stance. Archive for the Psychology of Religion, 42(1), pp.46–62. doi:https://doi.org/10.1177/0084672419900547.

systems. Religions offer more than belief—they provide structure for belonging. Research shows that people bond most with those who share key traits: language, birthplace, education, hobbies, values, music, and humor. Religion clusters many of these into one package. It creates in-groups with shared songs, codes, taboos, and cosmologies. The result is a system that binds people together at the deepest level—emotionally, cognitively, and spiritually. Finally, brain studies confirm that religious rituals and experiences activate the same regions involved in social bonding. The brain's default mode network, which processes self-awareness and others' perspectives, lights up during prayer and meditation. Endorphin-rich circuits flood the system with warmth and reassurance. It is no surprise that religious practice often boosts mental health and social trust. In sum, as human groups grew larger and more complex, religion evolved not just as a set of beliefs but as a vital tool for cohesion. It helped early communities hold together, creating unity through shared stories, rituals, and feelings of sacred connection. The religious mind is, at heart, a social mind, designed not just to understand the world—but to hold people together.

3.4. Daniel Everett

(Language as invention: Rethinking language through culture)

'We invented language to allow one person to guide the imagination of another'.

— Daniel L. Everett, The Instruction of Imagination

'Language is a tool shaped by culture and used to build a communal reality'.

— Daniel L. Everett, Language: The Cultural Tool

The gift of Prometheus

In 'Language: The Cultural Tool[138]', Daniel Everett draws a compelling comparison between fire and language, using the myth of Prometheus to explore what sets humans apart. Prometheus, whose name means 'forethought', defies the gods by giving fire to humans, allowing them to survive and build civilisation. This myth illustrates how a tool—once forbidden—can catalyse human transformation. But Everett suggests that fire, powerful as it is, pales in comparison to the true engine of human culture: language. Language, unlike fire, is not a force borrowed from nature but something wholly human-made. While fire offers warmth and light, language creates understanding, identity, and collective memory. For Everett, it is language—not tools or genes—that most fully explains the complexity of human life. It is what allows people to pass knowledge across generations, to collaborate in groups far beyond the size typical of other primates, and to shape worlds of meaning beyond what is immediately visible or known. The biblical story of Babel, in contrast to the Greek myth of Prometheus, presents language as dangerous. In Genesis, God breaks the unity of humankind by introducing linguistic diversity, seeing shared speech as a threat. This divine fragmentation, however, produces not weakness but strength. The multiplication of languages reflects the adaptability of the human mind and the diversity of cultures—what Everett sees not as a punishment, but as a flourishing. Language, in Everett's view, is a solution crafted by humans in response to their environment, not an innate module pre-wired into the brain. He argues that it developed slowly, shaped by culture and necessity, rather than appearing suddenly through a genetic mutation.

[138] Everett, D. (2012). Language: The Cultural Tool. New York: Pantheon

Just as early humans learnt to control fire over generations, they created language as a response to social and communicative demands. It became a means not only to name the world but to negotiate relationships, tell stories, and forge group identities. This view positions language as a cultural artefact—a tool made by people, shaped by context. Like fire, language is versatile, adapting to different needs and pressures. Its diversity across cultures is not accidental; it reflects how people solve problems specific to their environments. A language rich in tense and aspect may emerge in societies where tracking time is crucial; one with simple structures may develop where speed and efficiency are more valuable. Language, then, is neither universal in form nor fixed in origin. It is a flexible system moulded by use, history, and belief. Everett's project is not simply to explain how language works, but to reframe what it 'is'. He challenges the idea of a universal grammar embedded in the brain, suggesting instead that language is more like fire: invented, passed on, modified, and harnessed for human goals. It emerges from the interaction of brain, culture, and environment—not from biology alone. Language, he argues, is the Promethean gift humans gave to themselves. It has allowed people to build civilisations, bind generations, and create meaning where none existed. Unlike fire, it illuminates not just the world around but the inner lives of others. It is through language that humans share their fears, beliefs, and hopes, making it the most powerful tool ever forged.

The cultural tool

Daniel Everett weaves personal experience with cultural insight to explore language not as a prewired instinct, but as an invention born of necessity—an adaptive tool much like fire or the bow and arrow. He recounts a pivotal moment during his 1976 jungle survival training in Chiapas, where even a machete could not secure food. Watching another camper bring down an animal with a bow and arrow left him stunned—not only by the effectiveness of the tool but by the realisation that some challenges demand the right instrument, not brute effort. This moment stayed with him as a lesson about tools: the right one changes everything. Language, Everett argues, is humanity's most powerful tool—not because it is genetically encoded, but because it is culturally invented and shared. Just as the bow and arrow emerged to solve the problem of fast-moving prey, language arose to solve the challenge of coordinating thought, emotion, and action in increasingly complex social settings. Unlike fire, which can be found in nature, or a spear, which can be carved alone, language depends on interaction. It is not built in isolation, but collectively, through social life. Everett challenges the theory that language is hardwired into the brain via a universal grammar. Instead, he proposes that language is a cultural response to the human need for cooperation. Every society solves communication problems in its own way, and language reflects those solutions. The structure of a given language, its complexity or simplicity, is not dictated by biology but by the functional demands of the community. This view redefines language as an extension of tool use. It allows humans not only to share information, but to shape social bonds, pass down knowledge, and define roles. In the Amazon, Everett observed that the Kĩsedje and Pirahã peoples use speech not simply to express thoughts, but to perform rituals, settle disputes, and create solidarity. Their language is shaped by their cultural values—what matters is not what 'can' be said, but what 'needs' to be said in their world. Language, then, is no more universal in its form than any other cultural artefact. Its diversity—of grammar, sound, and expression—mirrors the diversity of human environments and histories. Just as blues music emerged from a specific cultural context, so does every language reflect the struggles, hopes, and habits of its speakers. Language is a mirror of the human condition: flexible, inventive, shaped by experience. Everett sees this not as a limit, but as a gift. Recognising language as a cultural invention means accepting its mutability—and celebrating its richness. The loss of any language is not just the disappearance of words, but of

a way of seeing the world, a solution forged over generations to the basic challenge of being human together. Language is not given—it is made. And like all great tools, its power lies not in its structure, but in its use.

Does Plato have a problem?

'Language: The Cultural Tool' questions a long-dominant assumption: that language is an innate biological faculty, hardwired into the human mind by evolution. Instead, he argues that language is a cultural invention—an adaptive, evolving tool shaped by the needs, values, and practices of human societies. This argument challenges linguistic nativism, particularly the view popularised by Noam Chomsky, who revived Plato's ancient dilemma to support the theory of universal grammar. Plato's Problem, as formulated in modern linguistics, asks: how can people know so much from so little experience? Plato originally posed this puzzle in the 'Meno', suggesting that learning is really the recollection of prior knowledge the soul had before birth. Chomsky adapted this idea in the twentieth century to argue that children acquire language too quickly and uniformly for it to result from learning alone. Thus, there must be a biological structure—universal grammar—that makes this rapid learning possible. This notion has had enormous influence. Researchers have pointed to uniform stages of child language acquisition, the so-called 'critical period' before puberty, deep similarities across world languages, and genetic markers like FOXP2 as evidence of an innate linguistic faculty. Yet as Everett demonstrates, these claims often rely on circular logic or overinterpret the data. FOXP2, for example, is involved in general motor control, not exclusively language. Similarly, so-called 'language areas' in the brain, such as Broca's area, are also used in music, memory, and tool use, suggesting that the brain is flexible rather than functionally compartmentalised. Against this backdrop, Everett offers an alternative: language emerges from culture and cognition in interaction. It is not a pre-programmed capacity, but a tool developed in the same way as fire, agriculture, or writing. It spreads, mutates, and becomes more sophisticated through social learning, necessity, and innovation. Everett draws heavily from his decades of fieldwork with the Pirahã people of the Amazon. Their language lacks feature common to many others: no numbers, no colour terms, no creation myths, no fixed kinship categories. These absences once puzzled linguists. But Everett argues they reveal a deeper cultural logic—one that values immediate experience, direct observation, and practical communication over abstraction. Pirahã culture shapes what is said, how it is said, and whether it is worth saying at all. This perspective reframes the discussion. Rather than looking for a genetic blueprint of language, Everett invites us to see language as a social adaptation. Humans, he says, are 'tool-using animals', and language is among their most important tools—not because it emerges from specialised DNA, but because it solves a critical problem: how to coordinate complex activity in large, cooperative groups. Like bows, boats, or bread-making, language is invented, passed down, and shaped by trial, error, and imitation. Plato's Problem, then, does not require an appeal to the metaphysical or the genetic. Humans can learn a great deal from little input because they share brains shaped by similar problems, cultures shaped by similar social needs, and the capacity for symbolic representation. A child raised in a society that values storytelling will develop a rich narrative ability; a child raised where survival depends on gesture and silence will adapt accordingly. Language reflects these conditions—it does not precede them. Everett's challenge to linguistic nativism has sparked controversy, but it also opens a new path. If language is a cultural tool, then its study must include anthropology, psychology, history, and philosophy—not just neurology or syntax. It demands that we ask how language adapts to the structures of belief, ritual, and daily life, and how those structures in turn evolve as language evolves. Plato's legacy endures, not because his solution was final, but because the question remains urgent. How do

people come to know and speak of what they have never seen? Everett's answer is grounded not in metaphysics but in mud, music, and memory. Humans invent meaning by living together, facing problems, and learning to share solutions. Language, in this view, is not a miracle of biology but a triumph of culture.

Cultural effects on grammar

Herbert Simon once remarked that complexity lies not in the object itself but in the description, we choose to give it. This insight proves especially true when thinking about language. Grammar, often treated as a rigid system of rules and structures, is in fact deeply intertwined with culture. Its form evolves not in isolation but in response to the lived experience of its users. 'Language: The Cultural Tool' offers a compelling case for understanding grammar not as a universal blueprint, but as a flexible adaptation to cultural needs and environmental constraints. A striking example of how culture and grammar intersect is the development of the Cherokee syllabary by Sequoyah in the early 19th century. Unlike alphabets that break down words into individual sounds, Sequoyah's syllabary was composed of symbols that each represented entire syllables. This system suited the Cherokee language structure and enabled literacy to spread rapidly among Cherokee speakers. The choice of script was not accidental; it reflected a cultural context where efficient memorisation and practical communication were paramount. While eventually replaced by an alphabetic system to bridge communication with English, the syllabary stands as a reminder that language tools are built in response to local pressures. Writing, once introduced, does more than record speech—it transforms it. Literacy allows thought to become externalised, structured, and revisited. Where speech fades as soon as it is spoken, writing endures, inviting reflection. It enables more complex expressions, greater precision, and abstraction. This shift in medium has grammatical consequences. In oral societies, where environmental noise and the absence of a written record create the risk of misunderstanding, redundancy becomes essential. A single idea may be repeated multiple times to ensure it is heard, remembered, and understood. But in written societies, repetition often gives way to economy, and language becomes denser, more tightly structured, and more hierarchical in syntax. Among the Pirahã people of the Amazon, Everett found a language shaped by a very different set of pressures. Their culture emphasises the here-and-now—the principle of immediacy of experience. In Pirahã, statements must be grounded in direct evidence: what has been seen, heard, or inferred firsthand. This cultural value has far-reaching effects on grammar. Notably, Pirahã appears to lack sentential recursion—the ability to embed one clause inside another. Rather than say 'John thinks that Mary believes that the moon is made of cheese', the Pirahã would break it down into successive statements, such as 'John spoke. Mary said the moon is made of cheese'. The language avoids the stacking of ideas and favours sequences grounded in reality. This is not a lack of complexity, but a different form of it—one better aligned with the Pirahãs' worldview.

Cognitive recursion

Interestingly, recursion may still appear in Pirahã storytelling, not at the sentence level but through layered narrative structures. A story may unfold with nested events and shifting perspectives, showing that cognitive recursion—the ability to think recursively—is still present. The culture resists recursion in speech but not in thought, showing how cultural values can filter what kinds of linguistic expressions are considered useful or acceptable. Grammar, then, is not a one-size-fits-all system. Its features reflect the tasks it must perform. In societies where abstract planning and record-keeping are essential, grammar may grow more layered and hierarchical. In cultures oriented toward immediacy, grammar simplifies and foregrounds

clarity and relevance. For instance, while some languages evolve elaborate case systems to track roles in complex sentences, others reduce these distinctions, relying on context or word order instead. Each system emerges from a balance of needs, shaped by the social and cognitive habits of its speakers. This view challenges the idea that recursion or any other grammatical trait is a universal hallmark of human language. If a language can function without recursion, then recursion may not be a necessary feature of grammar. It may be one strategy among many, employed where useful and omitted where not. This does not mean that Pirahã speakers are cognitively limited—only that their language has evolved to reflect their culture's values and priorities. The ability to use tools flexibly is, after all, one of humanity's defining traits. Everett's broader argument is that language itself is a tool, no different in essence from the bow and arrow or the canoe. Tools arise to solve problems; they are passed down, adapted, and sometimes abandoned when better solutions emerge. Language must be understood in this light—as an invention honed by human communities to meet the challenges they face. Grammar is not fixed in stone, but moulded like clay, its form dependent on the hands that shape it. Ultimately, language diversity is not a problem to be solved but a resource to be preserved. Each language offers insight into how different groups have met the challenges of life. The structures of grammar—whether recursive or not—reflect a conversation between culture and cognition, between environment and imagination. Just as there is no universal tool for every task, there is no universal grammar for every culture. The Pirahãs' grammar may be unfamiliar, even disorienting, to outsiders. But it is a grammar of happiness, shaped by a way of life rooted in the present. In this sense, the structure of a language is less a mirror of human nature than a record of what a community has found worth expressing.

How language began?

Language did not start with a word. It started with a conversation. In 'How Language Began: The Story of Humanity's Greatest Invention[139]', Daniel Everett argues that language began with Homo erectus, who created culturally invented symbols. Over 60,000 generations, humans combined gestures, vocal tones, and motor control to form speech. Challenging the importance of grammar and storytelling, Everett emphasises social and neurological complexity as key to language's evolution and humanity's rise above other species despite physical vulnerability. In 1991, deep in the Brazilian Amazon along the Kitiá River, Daniel Everett sat beside two Banawá men, adjusting headsets and fiddling with microphones. The men—Sabatão and Bidu—normally would have been hunting in the jungle with their blowguns and darts, but that day, their mission was different: they were going to talk. Everett's goal was to capture natural, spontaneous dialogue—something precious and rare in field linguistics, where the presence of a microphone often stiffens speech into performance. But that day was different. The two men began simply, in Banawá: 'Let's talk today'. 'Yes. Daniel likes our language very much'. 'Yes, I know'. 'I will talk. Then you can tell a story about the jaguar'. 'Yes'. What followed was an hour of storytelling, reminiscing, and agreement. For Everett, it was a moment of revelation—not just linguistically, but anthropologically and philosophically. These men were not simply speaking; they were doing what humans do best: building meaning together. Conversation like this illustrates what language truly is. It is not a code to be cracked or a dictionary to be memorised. It is a social act—a tool created and adapted for human cooperation. In this light, language did not begin with nouns or verbs or even the famed 'first word'. It began when one hominin looked another in the eye and made an intentional sound, and the other

[139] Everett, D. (2017) How Language Began: The Story of Humanity's Greatest Invention. London: Profile Books.

responded. This call and response, this feedback loop, this shared focus—that was the beginning. Human language is grounded not in words alone, but in shared context. In that jungle exchange, they signalled not just what language to use, but also a promise to avoid Portuguese and commit to Banawá, for the benefit of Everett and for the pride of the speakers. When one said, 'Let's remember how things were a long time ago', no additional context was needed. The past they referenced was a shared one. That is how all language works: much of it is unstated, existing in a realm of implied meaning shaped by culture, memory, and mutual experience. So where did this ability come from? Language likely began with 'Homo erectus', over a million years ago. These ancestors made tools, travelled vast distances, and worked in groups—behaviours that suggest the presence of symbolic thinking and some form of early communication. Over generations, pointing became miming, miming became vocalising, and vocalising became speaking. The trajectory was not linear or smooth. It was shaped by environment, necessity, innovation, and social bonds. Unlike birdsong or primate calls, human language is built on arbitrary symbols. A word like 'tree' has no natural connection to the object it refers to. That arbitrariness is what makes human language flexible. It allows us to discuss not only what is present, but what is absent—what was, what might be, and even what never could be. Language turned humans into time travellers and mind readers. It let us share not just tools but ideas, and not just ideas but dreams. Everett's fieldwork reveals something else: how fragile this invention is. The Banawá language has fewer than a hundred speakers. If they vanished tomorrow, they would leave behind almost no material trace—no cities, no monuments, no written texts. Would archaeologists of the future recognise them as linguistic beings? Probably not. And yet, their ability to reflect, joke, recall, and plan—these are all feats of linguistic genius. The loss of any language is the loss of a worldview. When a language dies, a whole map of how to be human vanishes with it. The Banawá, like so many Indigenous peoples, remind us that language is not about technological complexity. It is about the richness of human connection. The simplest exchanges often carry the deepest meaning. Everett concludes that language did not fall from the heavens, nor did it erupt from a single gene. It grew with us, in us, and between us. It emerged not from logic but from love, not from design but from need. Not with the Word, but with the Conversation.

A kingdom of speech

Language did not emerge fully formed, nor was it the product of a sudden divine spark. It evolved, slowly and cooperatively, shaped by the minds and cultures of early humans. 'How Language Began' shows that in the heart of this development lies the symbol—a socially agreed-upon link between a sound or gesture and a meaning. Symbols are not natural objects; they reflect cultural consensus. A serpent might represent danger, not because of biology alone, but because generations agreed it should. This shared meaning became the groundwork for language. Daniel Everett emphasises that language is far more than strings of words. It is a cultural system—embodied, interactive, and constantly evolving. In early human groups, communication was likely a full-body experience: gestures, tone, rhythm, and posture worked together with vocal sounds to express intent and emotion. Over time, these signals grew more abstract. They were broken down into discrete, combinable units—first into syllables, then phonemes—allowing infinite combinations and expressions. This transition is what linguists call 'duality of patterning', where meaningless sounds like 'k' or 'a' combine into meaningful words like 'cat'. From there, grammar emerged—not as a set of rules imposed from above, but as an adaptive structure shaped by daily use. Simple grammars began as linear constructions—short, unconnected expressions. Later, humans developed hierarchical systems that embedded meaning within larger structures. The most complex grammars became recursive, allowing

phrases to contain versions of themselves, as in: 'The man who said the boy who ran was tired is lying'. Everett identifies three main types of grammar in human languages. G1 grammars are simple and flat, like a string of words without internal organisation. G2 grammars introduce hierarchy, where phrases are nested within others. G3 grammars are fully recursive, capable of infinite depth and flexibility. This development was cultural, not biological—it did not depend on a sudden brain mutation but on the shared efforts of communities to communicate more effectively. Culture and language shaped one another. As early humans began to live in larger groups, they needed more refined ways to express intentions, delegate roles, and coordinate actions. The invention of grammar allowed humans to share more than needs or threats—it made it possible to pass on memories, stories, strategies, and beliefs. Language became not only a way to survive but a way to be human. This achievement was not unique to modern Homo sapiens. It began with Homo erectus, who spoke in ways that structured their social worlds and laid the groundwork for everything that followed. They gave rise to the most powerful tool humans would ever wield—not fire or metal or machines, but speech itself. They did not invent a language. They built a kingdom of speech.

4. LINGUISTIC THEORIES

4.1. From logos to langue

(Words, Signs, and Systems: The western evolution of linguistic thought)

'The word is not the thing'.

— Alfred Korzybski, Science and Sanity

'Language is not a function of the speaker, it is a product that is passively assimilated by the individual'.

— Ferdinand de Saussure, Course in General Linguistics

Linguistic thought from Socrates to Saussure[140]

In 'Landmarks in Linguistic Thought: The Western Tradition from Socrates to Saussure' by Roy Harris, language is seen as central to human identity, not only as a medium of expression but as the condition for law, morality, and political order. The Greek term 'logos' captured both speech and reason, making language inseparable from thought itself. In this vision, language defined the rational animal. From Homer to Plato, language was revered as a vehicle of truth and collective memory. The Sophists, despite their controversial status, were among the first to treat language as a subject for systematic inquiry, sparking debates that shaped philosophical inquiry for centuries. These debates centred around questions that would echo through linguistic history: Is language natural or conventional? Is it governed by fixed rules? Can it be broken down into universal parts of speech? Greek thought remained relatively insular, focusing

[140] Harris, R. and Taylor, T.J. (1997). Landmarks in linguistic thought : the Western tradition from Socrates to Saussure. London ; New York: Routledge.

primarily on its own dialects, but the political expansion of Hellenism and later the Roman Empire gave language a new role as a unifying and governing tool. Latin, adopted across the empire, carried with it the grammatical categories and rhetorical structures inherited from Greece. Public discourse became formalised through grammar, rhetoric, and logic—three disciplines that were interwoven in Roman education and administration. Medieval Europe inherited this classical legacy, with Latin remaining the language of power, religion, and scholarship. Education revolved around the trivium, and Latin grammar was preserved and taught with near-religious reverence. The Renaissance and early modern periods brought exposure to new languages and revitalised ancient ones. The printing press and voyages of exploration made linguistic diversity a new fact of life, though early humanists still viewed Greek and Latin as the highest standards. Over time, vernacular languages gained ground, and attention shifted to their structure and development. Language was no longer just a passive mirror of eternal truths but began to be seen as a living, changing force shaped by culture, history, and human creativity. The Enlightenment further transformed linguistic inquiry. The emergence of comparative philology in the nineteenth century, fuelled by the discovery of Sanskrit, led to the reconstruction of language families and historical change. The Indo-European hypothesis and the methods of the Neogrammarians introduced a scientific approach to linguistic evolution, often modelled on biological principles. Finally, with Ferdinand de Saussure's structuralism, the focus shifted from the historical development of language to its internal systems and oppositions. Language was no longer a mere label for external reality, but a structure of signs governed by relations and difference. This marked a decisive break with the older tradition and opened the door to twentieth-century linguistic theories. The traditional view of language as the vessel of rational thought and social order now faces its structuralist counterpart: a self-contained system of signs, detached from external reality. How does the shift from understanding language as 'logos'—the union of reason and speech—to Saussure's 'langue'—a system of arbitrary signs—alter our conception of language's power to shape thought and collective life?

Socrates on names as conventions

In Plato's 'Cratylus', Socrates explores the question of whether names are naturally correct or simply the result of human convention. The dialogue, involving Socrates and his interlocutors Hermogenes and Cratylus, presents the earliest recorded philosophical debate on language in Western thought. Cratylus asserts that names have a natural correctness grounded in the essence of things, while Hermogenes contends that names are merely conventions agreed upon by users. Socrates mediates between these extremes, suggesting that although language contains conventional elements, it cannot be entirely arbitrary if it is to function as a tool of knowledge and communication. Socrates likens language to tools like a loom or a hammer—objects that have a structure suited to a specific function. Just as a tool reflects its purpose in its design, so must a name reflect the nature of the object it names. He suggests that early name-givers, through intuition or insight, attempted to encode the essence of things into the sound and structure of words. Names, then, are not mere labels but attempts to mirror reality using the elements of speech—letters, syllables, and phonetic composition. The Greek word 'onoma' includes both proper names and general terms, reflecting how ancient thinkers did not yet separate linguistic categories systematically. Socrates' method includes etymological exploration—sometimes playful, sometimes speculative—to demonstrate how names might relate to meaning. He points to examples where names seem to correspond naturally to their referents, such as Astyanax, 'lord of the city', which reflects the role of Hector's son, and suggests that such names carry more than convention—they carry meaning through

resemblance. However, Socrates also warns against overly liberal etymology. If one inserts or removes letters at will, any word can be made to mean anything, rendering etymology arbitrary and unreliable. The integrity of names, like the integrity of arguments, depends on restraint and reason. Still, Socrates admits that pronunciation changes over time and that some Greek words derive from foreign languages, which complicates the task of interpreting names' origins. This acknowledgement reflects the complexity of linguistic development and the interplay between natural and social forces in language. Cratylus ultimately retreats into a rigid view of naturalism, claiming that only the correct name truly names a thing. Hermogenes, by contrast, maintains that names are assigned by usage and can change with no loss of meaning. Socrates suggests a middle path: names originate with a rational attempt to express truth, but language is shaped over time by convention and context. The essence of the original name may persist, but its usage and pronunciation evolve. For Socrates, the stakes of the debate go beyond linguistics. If language is disconnected from reality, then communication collapses into manipulation, and truth becomes impossible to attain. Plato uses this dialogue to argue for the philosophical grounding of language in truth, not in social agreement. Language, though imperfect, points toward the eternal realities of the forms. It is the bridge between the material and the intelligible world—a medium for philosophy, not merely for rhetoric. Socrates' middle path is that names begin as attempts to capture the essence of things but inevitably evolve through convention. Can language ever fully mirror reality or remains forever a blend of intuition and agreement?

The Bible and diversification of language

The Biblical account of language begins with a striking moment of divine delegation: God forms every beast of the field and brings them to Adam to see what he will name them. This act, recounted in 'Genesis 2:19–20', presents naming as the inaugural human act—language as humanity's first responsibility. Adam is not given names; he creates them. Whatever Adam calls each living creature becomes its name. This story positions the human capacity for naming as an essential element of creation itself, not merely a response to it. In this view, language is both a gift and a power—a divine trust placed in human hands. Unlike some linguistic traditions that view language as inherent in nature or divine utterance, the Genesis account assumes language originates with human invention, albeit within a sacred context. Adam's naming of animals is not corrected or guided by God, suggesting that names do not possess innate correctness, but instead derive their legitimacy from human assignment. This implies a conventionalist view like Hermogenes in Plato's 'Cratylus': names are valid because they are agreed upon, not because they mirror a natural essence. This idea gains theological weight through its silence: the text does not explain how Adam chooses names, leaving his creative process to interpretation. Enlightenment philosophers speculated widely—Leibniz believed names mirrored the mental images of objects; Locke saw naming as a pragmatic act, grounded in sense perception and abstraction. But Genesis itself remains focused on the functional outcome: language exists because Adam names, and the world is made intelligible through those names. The narrative of the Tower of Babel in 'Genesis 11' shifts the focus from origin to diversification. At first, humanity is united by one language and one speech. Their shared ambition—to build a tower reaching to heaven—represents the collective power of linguistic unity. God's intervention shatters this unity, scattering the people and confounding their language. This moment marks the theological explanation for the plurality of human tongues. Babel (from the Hebrew verb 'balal', 'to confuse') becomes the site where linguistic difference is born, not as punishment per se, but as a divine measure against unchecked human ambition. Theologically, these stories convey a complex relationship between language, authority, and limitation. Adam's naming grants humanity linguistic dominion: Babel

introduces its boundaries. The result is a paradox: language is both a sign of human rationality and a limit to human pride. Names are tools of order, but also reminders of disorder. Philosophically, these texts embed core assumptions into Western thought. They present names as secondary to things, supporting the idea that words merely stand in for meanings—nomenclaturism. This view resurfaces in later thinkers, from Augustine to Wittgenstein, who describe language as a rule-bound, social tool. Yet in both Biblical stories, naming takes place in solitude—Adam names before Eve exists; Babel's confusion occurs en masse but ends in division—suggesting that language precedes, and perhaps even enables, social life itself. Together, the Genesis accounts reflect the enduring tension between unity and plurality, authority and ambiguity, creation, and confusion—all through the lens of language. How does the movement from Adam's creative act of naming to the Tower of Babel's fragmentation shape our understanding of language as both a source of order and a catalyst for disunity?

Thomas of Erfurt and William Caxton

Thomas of Erfurt's 'Grammatica Speculativa', composed in the early 14th century, marks one of the most ambitious attempts to treat grammar as a rational science. As a leading figure among the Modistae, or speculative grammarians, Thomas sought to uncover the universal principles of language through what he called the 'modi significandi'—modes of signifying. He opens his treatise by declaring that a true understanding of grammar depends on recognising its foundational principles, which reflect not only linguistic rules but also metaphysical and logical structures. Grammar, for Thomas, is not merely a tool for communication but a mirror of reality, designed in harmony with the divine order. Influenced by Aristotle and the scholastic method, Thomas argued that language is shaped by the interplay between the external world, the intellect, and expression. Words correspond to mental impressions, and these impressions in turn correspond to things in the world. Grammar reflects this alignment: signs signify concepts, which reflect being. Thomas divides the modes of signifying into active and passive types. Active modes concern how sound patterns convey the nature of things—such as actions or qualities—while passive modes relate to how the properties of those things determine the function and form of their corresponding words. A verb like 'trod' expresses an action (active mode) and is categorised as a verb (passive mode), defining how it combines syntactically. Thomas believed that understanding these modes was essential not just for proper usage but for grasping how thought becomes language. This conception of grammar as the bridge between thought and being informed the Modistae's broader project to unite grammar with logic. Grammar organises language into signs, words, and parts of speech, forming the raw material for logical propositions. For Thomas, syllogistic reasoning and scientific discourse are possible only because language has an internal structure that mirrors reality. Yet Thomas's vision is not without limitations. His model, developed in the context of Latin scholasticism, assumes Latin as the default or universal language. This overlooks the vast grammatical diversity of the world's languages and fails to account for irregularities, exceptions, and context-dependent variation. For example, his explanation of gender as metaphysically motivated breaks down when applied to lexical pairs like 'lapis' (masculine) and 'petra' (feminine), both meaning 'stone'. By excluding phonetics and privileging symbolic meaning, Thomas's theory neglects how cultural and phonetic differences influence linguistic structures. Still, the speculative grammarians left a lasting imprint. Their belief that language embodies a rational, universal order foreshadowed later efforts in comparative and structural linguistics. More than a century later, William Caxton, England's first printer, confronted a quite different linguistic problem: not the universal logic of language but the chaotic multiplicity of English dialects. In the prologue to his 1490 translation of the 'Eneydos', Caxton recounts an anecdote involving two

merchants whose request for eggs was misunderstood due to dialectal variation. One used the northern word 'egges' and was not understood; the other said 'eyren' and was. Caxton uses this moment to reflect on the instability of English, comparing it to the phases of the moon—always shifting and never fixed. For Caxton, this variability posed a serious challenge, especially in the new age of print. Whereas hand-copied manuscripts could accommodate regional dialects, the printing press required consistency. The problem of what form of English to print became not only a practical dilemma but also a philosophical one about the very nature of language and identity. Caxton's choice to adopt the London dialect—a variety already associated with commerce, governance, and literature—played a crucial role in establishing it as the basis of Standard English. He printed texts in this dialect, not because it was inherently superior, but because it had social prestige and the widest reach. In doing so, Caxton helped transform one regional dialect into a national language. His work illustrates how technological change, linguistic diversity, and social forces converge in the shaping of language. Caxton's reflections mirror a broader European moment. Across the continent, printers, poets, and philosophers were grappling with the challenge of dialectal fragmentation and the desire for linguistic unity. In France, Joachim du Bellay urged the cultivation of French to rival Greek and Latin. In Italy and Spain, similar efforts gave rise to grammars and dictionaries aimed at standardising vernaculars. Together, Thomas of Erfurt and William Caxton represent two poles of linguistic thought in pre-modern Europe. Thomas approached language as a universal logical system, structured by divine and metaphysical laws. Caxton, by contrast, faced language as a historical, unstable, and regionally fragmented phenomenon. Where Thomas sought to explain the eternal principles of signification, Caxton wrestled with the temporal and practical consequences of linguistic variety. Yet both understood language as foundational to human culture—one through theory, the other through practice. Their respective insights reflect how language is shaped both by abstract systems and by the contingencies of history, technology, and geography. The tension between Thomas of Erfurt's quest for a universal, metaphysically grounded grammar and William Caxton's pragmatic standardisation of English dialects illuminate the ways in which abstract linguistic theory and concrete historical forces together shape the evolution of language.

John Locke on the imperfection of words

In Book III of 'An Essay Concerning Human Understanding' (1689), John Locke explores the nature and function of language, revealing both its indispensability and its deep flaws. For Locke, language is a necessary invention for expressing and sharing the private contents of the mind. Words serve as audible or visible signs for ideas, yet the relationship between word and idea is arbitrary and subjective. Locke warns that this arbitrariness, while enabling language's flexibility, is also its chief imperfection. Since words do not have any natural link to the ideas they signify, communication becomes fragile—especially as the ideas themselves may differ across individuals or cultures. Locke divides ideas into two types: simple ideas, which stem from direct sensory or reflective experience and are generally consistent among individuals, and complex ideas, which are constructed through internal mental combination. These complex constructions—such as 'justice' or 'liberty'—are prone to ambiguity and disagreement because they rely on unstable internal associations. When speakers use words for such ideas, listeners may not associate the same mental content, and so miscommunication emerges not from carelessness, but from the structural imperfection of language itself. Words, then, are doubly flawed: they rest on unstable personal ideas, and their public use assumes an equivalence of understanding that is rarely present. This leads Locke to emphasise the dangers of vague or manipulative speech. In particular, he criticises the use of undefined or metaphorical language

in philosophical and political discourse, where clarity is crucial. Figurative speech may be pleasing in literature, but in the pursuit of truth, it tends to obscure rather than illuminate. He writes that those who use words without clear meaning may confuse both themselves and their audience. Locke proposes that the best safeguard against linguistic confusion is clear definition. Especially in scholarly or scientific discourse, words should be tied to precisely defined ideas, ideally reducible to simple sensory impressions. This effort to clarify language by resolving complex terms into simpler constituents helped shape later Enlightenment interest in dictionaries, grammar, and standardisation. For example, Samuel Johnson's Dictionary aimed to fix the meanings of English words and minimise interpretive chaos—a project deeply inspired by Locke's critique of language's imperfections. Locke also recognises the historical and metaphorical roots of language. Many abstract terms are derived from physical metaphors—'grasping' an idea, for example—which reflects the way early humans extended bodily experience to express internal thoughts. This observation hints at a developmental link between language and cognition: language both expresses and shapes thinking. While Locke sees language primarily as a tool for expressing ideas that already exist in the mind, later thinkers would reverse the relationship, suggesting that thought itself may depend on linguistic structures. Ultimately, Locke is ambivalent about language. He understands it as a powerful and necessary tool for communication, but also a deeply flawed one. Because the meanings of words are private and mutable, and because the ideas they signify may differ between minds, miscommunication is almost inevitable. Still, through careful definition and rational analysis, language can approach clarity. Locke's work laid the foundations for modern linguistic philosophy by exposing the gap between thought and expression, and by insisting on the ethical responsibility of speakers to use words precisely and honestly. Locke's critique of the arbitrary link between words and ideas, and his insistence on the inevitable gap between speaker and listener, challenge our trust in language as a tool for precise communication.

Condillac on the origin of thought

Etienne Bonnot de Condillac proposed a theory in which language and thought develop together, each depending on the other. Against the backdrop of Locke's empiricism, Condillac argued that language is not merely a means of expressing already-formed thoughts but a precondition for the very possibility of thinking as humans understand it. Before the invention of signs, people had only fleeting sensations and instincts, unable to recall, analyse, or communicate their mental content. Language, once formed, allowed ideas to be retained, and compared, enabling reflection and the progress of reason. According to Condillac, the key difference between animals and humans lies in the use of signs. Without language, humans would resemble animals, governed by immediate stimuli. But by attaching sounds or gestures to experiences and recalling them voluntarily, they create the basis for thought. This transformation, from reacting to the world to reflecting upon it, marks the shift from sensation to understanding. Language becomes the tool that makes this possible by allowing voluntary memory and the comparison of ideas. In his speculative account, Condillac imagines language emerging from natural cries and gestures, such as expressions of pain or joy. These natural signs gradually become habitual and intentional, forming artificial signs. Over time, these signs are refined into words, allowing for the analytic dissection of complex experiences. In this process, thought becomes ordered and speech becomes structured. Language, then, is not a later addition to thought but its formative instrument. For Condillac, the process of thinking is fundamentally analytic: breaking down a whole experience into sequential parts. Language, with its linear nature, forces such decomposition. Thought, therefore, is not a mere internal mirror of sensations but a practice shaped by linguistic habits. In this sense, language teaches people how

to think. Words guide the mind's movement, and grammatical forms reflect different mental operations—desire, comparison, judgment, and abstraction. A central feature of Condillac's theory is the role of analogy. New words and ideas arise by relating them to already known signs, maintaining continuity in the development of language, and understanding. While the signs may be artificial and voluntarily imposed, they are not arbitrary in the strict sense; they evolve through analogical reasoning. This process grounds language in experience while also allowing it to expand into abstract realms. Condillac saw the degradation of language—its growing arbitrariness and confusion—as a loss of this original clarity. He imagined an ideal language in which every word transparently reflected the natural structure of thought and its historical development. Such a language would be a record of human understanding and a tool for its further refinement. By asserting that language is the basis of memory, reason, and abstraction, Condillac reshaped philosophical approaches to human knowledge. His work anticipated modern theories that explore how linguistic structures shape cognitive processes. His legacy lies in the claim that to understand human thought, one must begin with the origins and functions of language itself. How does Condillac's claim that language is not merely a vehicle for pre-existing thoughts but the very instrument that shapes and enables them to challenge our understanding of cognition? What might this imply for the ways we teach, learn, and study both language and thought?

Ferdinand de Saussure: Language as a semiological system

Ferdinand de Saussure's linguistic theory, posthumously published in the 'Cours de linguistique générale' (1916), revolutionised modern language studies by framing language as a structured, semiological system. His approach moved beyond viewing language as a passive reflection of external reality or a mechanical naming system. Instead, Saussure emphasised that language is a system of signs, governed by internal relations and social conventions, shaping how people perceive, categorise, and interact with the world. Central to Saussure's theory is the concept of the 'bilateral sign', composed of two inseparable components: the signifier (the sound pattern or word) and the signified (the conceptual meaning associated with it). This formulation challenged the long-standing belief that language naturally corresponds to the objects it names. Saussure emphasised the arbitrariness of the sign, arguing that there is no inherent connection between the signifier and signified; the association is based on social convention and maintained through communal usage. While some exceptions, such as onomatopoeia, might appear less arbitrary, even these are shaped by historical and cultural influences. By divorcing language from direct reference to physical reality and insisting on the psychological nature of meaning, Saussure rejected the simplistic idea that words map neatly onto things. For instance, the word does not refer to an actual thing in the world but to a mental concept shared within a linguistic community. Meaning, then, does not arise from objects but from the oppositional structure of language. This insight marks a foundational shift: language is a relational system, and the identity of each sign depends on its difference from others. This principle of opposition operates on multiple levels: semantic, phonological, morphological, and grammatical. At the semantic level, terms like 'fear', 'dread', and 'anxiety' gain their meaning through contrast. Removing one term would force a redistribution of meaning among the others. At the phonological level, phonemes are defined by how they differ from one another within a given system. Likewise, grammatical categories derive their function and value from their systematic differentiation. Saussure's model introduced further binaries to clarify his theoretical framework: langue versus parole, synchrony versus diachrony, and internal versus external linguistics. Langue refers to the underlying structure of a language—its rules, norms, and conventions—while parole refers to actual speech acts by individuals. Synchrony studies

language at a particular moment, treating it as a stable system, while diachrony analyses its historical changes. Saussure prioritised synchronic analysis, arguing that understanding the relational system at a fixed point was a necessary precursor to examining how language evolves over time. In conceptualising language as a social fact, Saussure drew from sociological traditions, particularly Émile Durkheim's idea that collective norms shape individual behaviour. He viewed language not as a product of individual psychology but as a communal institution—a collective agreement internalised by its speakers. The 'speech circuit' describes how linguistic meaning is generated through interaction between individual minds and social structures. Language exists not in isolated speakers or mental representations but within the communicative network of a community. Saussure critiqued earlier models of language evolution based on social Darwinism, such as those advanced by August Schleicher or Max Müller. He rejected the idea that languages compete like organisms in nature or evolve through territorial adaptation. Instead, he retained the metaphor of language as a living system but emphasised its internal coherence rather than external competition. Language, for Saussure, is a system where every element holds a place due to its difference from others—what he called a 'system of values'. As in economics, the value of a linguistic sign depends on its relation to other signs, not on a fixed referent. Saussure's influence was foundational for structuralist linguistics and extended into fields such as anthropology, literary theory, and semiotics. His emphasis on the interdependence of linguistic signs and the structured nature of meaning inspired theorists like Claude Lévi-Strauss and Roland Barthes. Later, generative grammar, particularly through the work of Noam Chomsky, would reject many of Saussure's sociological premises, proposing instead that language is rooted in universal cognitive structures. Chomsky's framework, which posited that language emerged from a genetic mutation and operates through an innate universal grammar, stood in stark contrast to Saussure's focus on language as a product of social convention and systemic relations. Despite such divergences, Saussure's ideas remain central to ongoing debates in linguistics. Functional and cognitive linguists have challenged structuralism's emphasis on opposition and arbitrariness, proposing instead that meaning often arises from similarity and embodied experience. Yet others defend Saussure's framework, arguing that his insights into the nature of linguistic systems remain relevant, especially for understanding how language operates within culture and society. Saussure's vision of language as a collective, structured, and relational system continues to shape contemporary understandings of meaning, communication, and thought. There is no need to infer internal meaning. Communication is successful not when minds align, but when actions do. Saussure showed that language is governed not by correspondence with reality, but by internally structured systems that balance arbitrariness with rule-bound constraint. Meaning arises not from natural signs but from shared human practices embedded in time, use, and form. Language is not a natural or mechanical system and emphasised its cultural, practical, and normative dimensions. Ultimately, our shared concern is not just with how language works, but with what it reveals about the human condition. Communication is not simply about transmitting ideas, but about participating in a shared world of meaning, judgment, and action. How does Saussure's view of language as a system of socially agreed-upon differences (rather than a mirror of external reality) reshape our understanding of how meaning is created and maintained within a community?

4.2. Death of the text

Charles Sanders Peirce

(Peircean semiosis: Icons, indices, and symbols in meaning-making)

'The essence of belief is the establishment of a habit; and different beliefs are distinguished by the different modes of action to which they give rise'.

— Charles Sanders Peirce

An overview of semiotics

Semiotics is the study of signs, meaning-making, and the processes by which organisms—human and non-human—interpret and communicate. The field encompasses everything from linguistic utterances to visual symbols, gestures, architectural forms, and even biochemical signals. A sign, broadly defined, is anything that stands for something to someone in some capacity, whether intentionally or not. Meaning, therefore, is not inherent in things themselves but emerges through interpretive acts. The modern foundation of semiotics was laid by Charles Sanders Peirce, who conceived of semiosis as a triadic relationship: a sign (or representamen), its object, and the interpretant—the mental effect or understanding it generates. This model transcended linguistic boundaries and applied to all communicative phenomena, from mathematical symbols to animal behaviour. Unlike Ferdinand de Saussure's dyadic model of signifier and signified, Peirce's triadic structure emphasised process and transformation over static structure, making it more applicable to dynamic, real-world situations. Historically, the inquiry into signs dates to Ancient Greece. The term 'semiotics' derives from the Greek 'semeion' ('sign'), used to describe omens and symptoms. Philosophers like Plato and Aristotle considered how language connects to truth and reality. Later, Augustine of Hippo advanced a unified theory of signs, distinguishing between things used as signs and things merely observed. This effort to bring nature and culture into a single system was further developed by medieval thinkers such as John Poinsot. In the modern era, John Locke formalised the term 'semiotike' in the 17th century, proposing it as one of the core branches of science alongside natural philosophy and ethics. Locke emphasised the role of signs in human knowledge and communication, anticipating many of the questions later addressed by structuralists and pragmatists. Saussure, working independently of Peirce, proposed semiology as a science of signs within social life. His emphasis on the structural relationships within language—particularly the arbitrary but rule-governed nature of signs—helped launch structuralism in the 20th century. Saussure's dyadic model centred on the signifier (sound-image) and the signified (concept), with meaning generated not by reference to reality but through differences between signs within a system. Semiotics later expanded beyond its linguistic roots. Thinkers like Umberto Eco viewed all culture as communication, asserting that any human practice could be interpreted semiotically. Semiotics now encompasses domains such as zoosemiotics (animal signs), phytosemiotics (plant signalling), and biosemiotics—the study of sign processes in all forms of life. These fields demonstrate how organisms adapt to and interpret their environments through structured sign systems. As an interdisciplinary science, semiotics bridges philosophy, linguistics, anthropology, and biology. It does not impose meaning but investigates how meaning emerges through social and natural interactions. Whether studying myth, fashion, architecture, or cellular signalling, semiotics reveals the patterned processes through which life is continuously interpreted and reinterpreted. Peirce's and Saussure's divergent frameworks—pragmatic and structural—form the twin pillars of a discipline that continues to illuminate the conditions of meaning across cultures and species.

What is a sign?

In 1894, Charles Sanders Peirce laid the foundation for modern semiotics by asserting that all reasoning depends on interpreting signs. To understand how humans think, Peirce began by identifying three fundamental mental states—feeling, reaction, and thought—each corresponding to his broader philosophical categories: Firstness, Secondness, and Thirdness. Feeling is an unmediated experience, a moment of pure presence, such as contemplating the colour red without naming or analysing it. This state is rare in waking life but reveals the mind's capacity for direct sensation. Reaction occurs when the self encounters resistance from the world, as in being startled by a loud noise. It signifies a forceful interruption, grounding awareness. Thought, in contrast, connects causes and effects through general rules. Observing that a noise starts when a door closes and stops when it opens, a person begins to reason. This triadic structure—uniting sensation, resistance, and mediation—underpins Peirce's theory of signs. A sign, for Peirce, is anything that mediates between an object and its interpretation. He distinguishes three classes of signs based on how they relate to their objects: icons, indices, and symbols. Icons represent through resemblance. A photograph, a realistic drawing, or a diagram shares visible similarity with what it depicts. Icons are essential for imagination, analogy, and the beginnings of communication, particularly when language is absent. In mathematics, visual models help clarify relationships; early human writing systems used pictorial icons to express ideas. Indices point to their referents through direct physical or causal connection. Smoke signals fire, a weather vane shows wind direction, and a pointing finger or footprint reveals a presence. Indices are context-dependent and anchored in real-world phenomena, allowing signs to reference specific locations, moments, or actions. They do not rely on interpretation but function automatically within a given physical situation. Symbols, the most abstract of the three, represent through social convention. Words do not resemble their referents, nor are they physically connected to them. Their meaning depends on shared usage, history, and agreement within a linguistic community. Symbols are inherently general and evolve over time, enabling complex reasoning, cultural transmission, and conceptual abstraction. They are the primary tools of language and logic, but they must often be grounded in the immediacy of indices and the intuition of icons to be meaningful. Peirce emphasised that all signs function within a triadic process that includes the sign itself, its object, and the interpretant—the effect or meaning produced in the mind of the interpreter. Icons give intuitive clarity, indices ground signs in empirical context, and symbols support generalisation and learning. Every act of reasoning involves this dynamic combination. For Peirce, thinking is not separate from signs but is itself a process of semiosis—the interpretation of signs unfolding over time. He likened this process to a living organism, where indices are the skeletal structure, icons the blood that animates, and symbols the evolutionary memory of human thought. In this way, signs are not merely passive representations but active forces shaping the understanding of reality itself.

Of reasoning in general

In his 1895 essay 'Of Reasoning in General', Charles Sanders Peirce presents reasoning as both a natural and logical process inseparable from the use and interpretation of signs. Reasoning is not a passive reception of impressions, but an active construction of beliefs based on prior knowledge. For Peirce, logic is the science of this process, and reasoning is its central mechanism. All thought, he insists, takes place through signs, and every reasoning act depends on their proper combination and interpretation. Peirce classifies signs into three categories: icons, indices, and symbols. Icons represent their objects through resemblance—a diagram, for instance, stands in for a spatial relationship. Indices are physically connected to what they signify, like smoke indicating fire or a thermometer pointing to temperature. Symbols, by

contrast, are signs established by learnt conventions and sustained through communal agreement—language, mathematical notation, and cultural symbols fall into this category. While icons and indices can support understanding, only symbols allow for assertions, propositions, and rational discourse. The interplay of these signs makes reasoning possible. Peirce describes reasoning as a triadic process where symbols synthesise the intuitive clarity of icons and the referential certainty of indices. An assertion like 'X loves Y' uses indices to refer to people and an iconic representation of affection, but it only becomes a proposition through symbolic structure. Reasoning thus entails assembling signs, comparing propositions (colligation), and isolating relationships (contemplation) to produce valid conclusions. Peirce distinguishes between demonstrative and experiential reasoning. Demonstrative reasoning, as in mathematics, proceeds through internal consistency and symbolic manipulation, allowing for repeatability and minimisation of error. Experiential reasoning deals with the external world, seeking regularities and forming laws from observation. This latter kind is always provisional, open to revision as new data emerges. At the core of Peirce's theory is his doctrine of perceptual judgment. Every cognitive act begins with perception, which is always singular but never devoid of generality. Even in a momentary sensation—such as seeing a bird fly across the sky—there is already a conceptual framing. Generality resides not in the singular perception but in the predicate applied to it, which can be extended to other cases. This blend of the singular and the general underpins reasoning and makes universal propositions possible. Peirce identifies three modes of reasoning: deduction, induction, and abduction. Deduction derives necessary consequences from given premises. Induction confirms generalisations by repeated experience. Abduction, the most creative and risky form, generates explanatory hypotheses by intuiting probable causes. While less certain, abduction is vital for innovation, enabling the leap from observation to theory. It is through abduction that reasoning approaches discovery. Ultimately, Peirce fuses logic with pragmatism. Meaning, he argues, lies in the practical effects of concepts—what they do in experience. This pragmatic maxim grounds reasoning in lived consequences. All knowledge, for Peirce, stems from perceptual judgments interpreted through signs, leading to hypotheses that guide further inquiry. Reasoning is thus an evolving process—a dynamic engagement between signs, perception, and understanding—that defines both logic and human intelligence.

Mikhail Mikhailovich Bakhtin

(Dialogism and the open text: Bakhtin's vision of language as event)

'The meaning of a text is not something hidden behind the words. It is something that emerges through the act of reading'.

— Hans-Georg Gadamer, Truth and Method

'Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction'.

— M. M. Bakhtin, The Dialogic Imagination

The Problem of the Text in Linguistics

In 'The Problem of the Text in Linguistics, Philology, and the Human Sciences', Mikhail Bakhtin challenges conventional understandings of language and text by emphasising the

inherently dialogic nature of all human communication. Unlike traditional linguistic approaches that isolate language into static systems of signs or codes, Bakhtin insists that texts are living events—utterances situated within dynamic, responsive relationships between speakers, listeners, and broader cultural forces. For Bakhtin, the text is not merely an object to be interpreted but a moment of interaction, shaped by multiple voices and directed toward multiple audiences. Every utterance, he argues, is inherently oriented toward an 'other', making it dialogic in nature, and every text exists in a web of ongoing communication. Bakhtin introduces the idea of the 'superaddressee'—a third party beyond the immediate speaker and listener who silently witnesses and judges the exchange. This superaddressee could be society, God, posterity, or an ideal reader. The presence of this imagined other highlights how communication is never private or closed; it always contains an excess of meaning not fully exhausted in the moment of dialogue. The utterance anticipates future interpretations and carries traces of past uses. In this way, texts are open, unfinalizable, and shaped by temporal and social forces. They exist not in a vacuum but in relation to other texts, voices, and expectations. Rather than treating language as a system of signs governed by internal rules—as Ferdinand de Saussure and structuralists proposed—Bakhtin argues for a pragmatic and situated view of discourse. Meaning is not generated solely through formal structures but through the interaction of real speakers in real contexts. Linguistics and philology, he suggests, too often neglect the concrete event of utterance. By contrast, the human sciences must account for the relational, cultural, and temporal dimensions of language, which can only be grasped through dialogue and interpretation. Bakhtin further criticises what he calls the 'monologisation' of experience—the attempt to reduce language to a single authoritative voice or meaning. He argues that every text is inherently polyphonic, containing multiple voices, perspectives, and intentions. Even a seemingly singular voice is shaped by the speech of others: prior usage, anticipated responses, and socially encoded expectations. This dialogism resists attempts to close meaning or enforce ideological closure. Instead, Bakhtin champions a view of language as participatory, open-ended, and ethically charged—always engaged in the give-and-take of meaning-making. The text, for Bakhtin, is not a product to be consumed but a process of becoming, an encounter between consciousnesses. Its interpretation is never complete, because it always exceeds the control of both the author and the reader. In this light, the study of language, literature, and culture must move beyond static analysis toward a model that honours the dialogic reality of human understanding. Bakhtin's vision of the text as an event of dialogue opens a radical path for linguistics and the human sciences. It situates meaning not in isolated systems but in living interaction, transforming the act of reading, writing, and speaking into a deeply ethical and social practice.

The Dialogical Principle

Tzvetan Todorov's presentation[141] of Mikhail Bakhtin's philosophy clarifies a fundamental distinction between two approaches to language: linguistics and what Bakhtin calls 'translinguistics'. Linguistics, rooted in Saussurean structuralism, treats language as a self-contained system of signs and rules, isolating syntax, morphology, and vocabulary from their social use. This abstraction allows for precision but removes language from its living context. In contrast, translinguistics focuses on utterances—speech acts situated in time, history, and interaction. For Bakhtin, the utterance is not merely a grammatical sentence but a socially

[141]Tzvetan Todorov (1998). Mikhail Bakhtin : the dialogical principle. Minneapolis: University Of Minnesota Press.

embedded event, irreducible to repetition or general rule. Its meaning arises in dialogue, not in isolation. Bakhtin sees the utterance as the central unit of discourse. Unlike language, which is repeatable, utterances are unrepeatable, bound to specific speakers, listeners, moments, and intentions. The utterance does not merely transmit a pre-existing message but is created through interaction. Translation, then, is not the decoding of static content but a new utterance shaped by a different context. This impossibility of full repetition or translation underscores the uniqueness of human communication and the necessity of interpretation. Meaning is not discovered but constructed. Thus, the human sciences, unlike the natural sciences, must always grapple with irreducible particularity. Bakhtin contrasts his dialogical model of communication with Roman Jakobson's linear scheme of sender-message-receiver. For Bakhtin, communication is not transmission but interaction. Meaning is co-produced, not encoded. The speaker, listener, object, and language all emerge through dialogue, shaped by prior utterances and anticipated responses. Jakobson's model isolates 'contact' as a technical function, whereas Bakhtin introduces 'intertextuality'—the recognition that every utterance is shaped by and responds to previous ones. No speech is original; all language is inhabited. Even inner speech is dialogic, reflecting remembered voices or imagined responses. Central to Bakhtin's theory is intertextuality, a concept later refined by Julia Kristeva. Intertextuality denotes the embeddedness of every utterance in a field of other utterances. Unlike linguistic relations of grammar or logic, intertextual relations are semantic, cultural, and historical. An utterance is always oriented toward a listener and shaped by previous discourse. It carries traces of past usage and anticipates future replies. This dialogic web constitutes meaning. Even so-called monologic texts contain multiple voices, ideologies, and perspectives. The novel, for Bakhtin, is the supreme expression of intertextuality. It thrives on polyphony—many voices—and embraces heteroglossia, the clash of different languages and values. Genres differ in their openness to dialogue. Prose, especially the novel, incorporates conflicting discourses, while poetry often isolates itself in aesthetic form. The representation of discourse itself also varies: some texts are single-voiced, where one perspective dominates; others are two-voiced or hybrid, embedding irony, parody, or dual intention. These structures are not formal tricks but reflections of dialogic reality. All speech is shaped by cultural struggle. Even simple utterances carry ideological weight. Bakhtin's philosophy of language thus redefines meaning as fundamentally relational. Words are not static containers but positions in a social dialogue. Meaning does not reside in the word alone, nor in the speaker's intent, but in the encounter between speaker, listener, and prior discourse. This encounter is always mediated by history, ideology, and power. The text is never closed, never final. Its interpretation is always provisional, shaped by the dialogic interplay of voices over time. This dialogical principle challenges any attempt to reduce language to mere code or message. It requires that one see communication not as mechanical exchange but as ethical encounter. In this view, language is not a neutral medium but a field of tension and interaction, where meaning is constantly renegotiated. Tzvetan Todorov's presentation of Bakhtin reveals the philosophical depth of this vision—one that remains essential for understanding human discourse, literature, and society.

Speech Genres and Text

Speech genres, as conceptualised by Mikhail Bakhtin, are fundamental to understanding how language operates across the spectrum of human communication. Every sphere of life—be it domestic, scientific, political, or literary—generates its own typical forms of expression. These relatively stable forms of utterance are known as speech genres, and they develop in direct response to the specific needs, conditions, and goals of each communicative domain. While their surface features may vary widely, they all participate in the broader unity of

language as a national or social phenomenon. Bakhtin distinguishes between two principal types of speech genres: primary (or simple) and secondary (or complex). Primary genres arise in spontaneous, everyday interaction—greetings, casual conversations, or instructions. These genres are closely tied to immediate reality and require no extended composition or reflection. Secondary genres, on the other hand, are developed in more structured, cultural contexts—novels, scientific reports, philosophical treatises. These absorb and reshape primary genres, embedding them in more complex and reflective discourse. For example, a dialogue in a novel mirrors everyday conversation but is layered with narrative intention and ideological positioning. What differentiates speech genres from abstract linguistic units is their status as complete, socially situated utterances. While a sentence may serve as a building block of grammar, an utterance is a whole unit of communication, complete with a speaker, an addressee, and a purpose. Each utterance is marked by its beginning and end, often determined by a shift in speakers. It encapsulates not just semantic content but a particular intention, emotional tone, and compositional structure. It is these features that allow the utterance to participate in a chain of communication—responding to previous speech and anticipating future replies. Speech genres are inherently dialogic. No utterance exists in a vacuum; each is a response to something and anticipates a reaction. This responsiveness ties speech not only to language but also to social interaction, history, and ideology. The speaker's awareness of the listener shapes the style, tone, and structure of the utterance. Whether addressing a friend, a crowd, or an imagined authority, the speaker modifies their speech according to the anticipated response. Thus, communication is always a kind of dialogue—even when only one voice is heard. This perspective extends to the concept of text. A text, for Bakhtin, is not just a collection of sentences but a structured utterance, shaped by and responding to its dialogic environment. Texts are part of ongoing communicative chains and participate in wider cultural and ideological dialogues. The study of texts must therefore consider not only their internal linguistic features but also their external relationships—with other texts, with readers, and with the cultural situations from which they emerge. Bakhtin's theory challenges any static view of language. It insists that meaning arises not from the internal logic of words alone but from their use in social contexts. Genres mediate between language and life, enabling people to communicate meaningfully in different settings. Recognising the role of speech genres in shaping utterances and texts reveals how deeply language is embedded in social life and how dialogue is the foundation of human expression.

From word to culture

Mikhail Bakhtin viewed language not as a fixed system of signs, but as a living, evolving medium shaped by social interaction and historical change. For him, the word is never neutral or solitary—it always carries traces of previous usage, past voices, and earlier contexts. Words pass from mouth to mouth, generation to generation, culture to culture, always marked by the dialogic encounters they undergo. In this movement, a word gathers social resonance and becomes an active participant in shaping consciousness, culture, and meaning. Bakhtin emphasises that the moment a person speaks, they inherit words that have already been used, already 'inhabited' by others. These words are not received in isolation; they arrive saturated with the intonations, judgments, and aspirations of prior users. As such, any attempt to speak or write becomes an act of reorientation—repositioning words within a new context while still echoing the old. This dialogic view sees language not as the expression of a solitary mind but as a meeting ground of multiple perspectives, voices, and intentions. For Bakhtin, the essence of speech lies in this relational dynamic. Every utterance is shaped not only by the speaker's intent but also by the anticipated response of others. Meaning is not transmitted as a fixed message but co-created through interaction. This principle defines his concept of dialogism: all

communication unfolds as a response to prior utterances and in anticipation of future replies. Even when someone speaks seemingly alone, they address an internalised other, an imagined audience or adversary. There is no absolute beginning in speech—only continuation. This understanding of language has profound implications for the study of literature and culture. In literary texts, particularly novels, Bakhtin identifies what he calls heteroglossia—the presence of multiple speech types, worldviews, and ideological positions within a single work. Novels, unlike poetic or monologic forms, can represent language itself as a subject. They dramatise the tension between official, authoritative speech and unofficial, everyday voices. In doing so, the novel becomes a site where culture reflects on its own language practices. Bakhtin also draws attention to the word as a cultural artefact. Words are not only shaped by their speakers but also structure how speakers think and relate to the world. A word is an 'ideological sign', expressing values and beliefs embedded in a community. It is not merely a vehicle for meaning but a space where meaning is contested, negotiated, and transformed. This makes language the most sensitive register of cultural life. Moreover, Bakhtin's thought resists finality. He insists that no word ever achieves a complete or final meaning. Language remains open-ended, with every utterance inviting further response. This vision opposes any authoritarian closure of discourse, whether in politics, art, or theory. It affirms the possibility of renewal and reinterpretation in every act of communication. Ultimately, Bakhtin's theory of the word dissolves the boundaries between linguistics, philosophy, art, and culture. From word to culture, meaning is dialogic, historical, and relational. Language, as he saw it, is the unfinished conversation of humanity.

Roland Gérard Barthes

(Beyond the author: Text as tissue of quotations)

'Every text is a mosaic of quotations; every text is the absorption and transformation of another'.

— Julia Kristeva, Word, Dialogue and Novel

'Language is legislation, speech is its code. We do not see the power which is in speech because we forget that all speech is a classification, and that all classifications are oppressive'.

— Roland Barthes

The death of the author

Roland Barthes (1915–1980) was a French literary theorist, philosopher, and semiotician who radically transformed the study of language, literature, and culture. Beginning with his early resistance to existentialist literary criticism, Barthes developed an approach that saw language not as a transparent tool of meaning but as a structure governed by codes, conventions, and cultural ideology. His work forms a bridge from structuralism to post-structuralism, with central focus on how meaning is produced, manipulated, and consumed. In 'Writing Degree Zero' (1953), Barthes challenged the existentialist ideal of sincerity in literature. He claimed that writing is never neutral; it exists within social and linguistic systems. While a writer may attempt innovation, their work quickly becomes conventional once adopted by others. Barthes stressed that 'writing' is distinct from style or language—it is a practice that must constantly resist ossification. Barthes deepened this critique in 'Mythologies' (1957), where he applied

semiotic analysis to everyday cultural objects. From wrestling matches to food and advertising, he exposed how bourgeois ideology naturalises arbitrary signs into cultural myths. Drawing on Saussurean linguistics, he described how a first-order sign (a literal object or image) is transformed into a second-order myth (a socially coded meaning). For instance, a photograph of a French soldier saluting the flag might signify patriotism, but Barthes showed how this image disguises ideology beneath the illusion of truth. While structuralism offered tools to dissect these systems of meaning, Barthes came to question its limitations. In 'The Fashion System', he analysed how language constructs fashion, revealing the artificiality of its rules. Yet he recognised that even this analytical language risked becoming another form of myth-making. The influence of post-structuralist thinkers, particularly Jacques Derrida, led Barthes to reject the idea of stable meanings or foundational truths. This shift is most famously articulated in 'The Death of the Author' (1967), where Barthes argued that meaning does not reside in the author's intention but emerges in the reader's engagement with the text. The author, he claimed, is a modern invention, used to anchor interpretation and repress plurality. By dethroning the author, Barthes opened the text to multiple, shifting meanings and liberated readers from imposed authority. Barthes described the text as a 'tissue of quotations', composed of fragments drawn from multiple cultural sources rather than a singular personal voice. The author, in this framework, becomes a 'scriptor', someone who merely assembles language without a privileged authority over its interpretation. The moment a text is written, the author's authority dissolves; meaning now belongs to language and the reader's response. This is not merely a literary provocation but a radical assertion of interpretive freedom. By refusing to locate a final meaning in the figure of the author, Barthes liberates the reader from the expectation of uncovering some hidden message and instead invites multiple, even conflicting interpretations. This argument has broader implications. It undermines traditional notions of authorship as a fixed identity tied to genius or intention. It also critiques the idea of a stable truth behind the text, encouraging readers to explore ambiguity, contradiction, and plurality. While Barthes was not the first to suggest such ideas—echoes can be found in modernist literature, Surrealist practice, and linguistic theory—his articulation remains one of the most influential statements of reader-centred interpretation. For Barthes, writing becomes an open field, no longer constrained by the figure of the Author-God, but made alive by the play of meaning in the hands of readers.

The Pleasure of the Text

In 'The Pleasure of the Text' (1973), Roland Barthes explores the intimate experience of reading, distinguishing between two types of textual enjoyment: pleasure and bliss. These terms do not merely describe reader responses but reflect fundamentally different relationships between text and reader. Pleasure is associated with the 'readerly' text—predictable, familiar, and aligned with dominant codes and conventions. It offers comfort, coherence, and confirms the reader's identity. Bliss, however, arises from the 'writerly' text, which disrupts expectations, destabilises language, and produces a visceral, even ecstatic, response. Such texts fracture the reader's subjectivity, evoking moments of intensity, loss, and transformation. Barthes contrasts these modes not simply to elevate one over the other but to reveal how literature operates on various levels—sometimes affirming the world and the self, sometimes dissolving them. The 'readerly' text leaves the reader as a passive consumer, whereas the 'writerly' text invites active co-creation. In reading a writerly text, the reader becomes a participant in the production of meaning, not simply a recipient. This process involves engaging with the play of codes—symbolic, cultural, hermeneutic—and embracing their instability. A text, for Barthes, is never self-contained; it is a 'tissue of quotations', a woven web of references and voices from across

history and culture. The corporeal dimension of reading is central to Barthes's theory. He imagines reading as a sensual, erotic act, where language touches the body through rhythm, voice, and sound. The pleasure of the text is not only intellectual but also physical. This emphasis on embodiment challenges the idea that reading is merely interpretation—it becomes affective, unpredictable, and often transgressive. Barthes celebrates the text's ability to subvert norms, revealing how language can exceed ideology and reason. By rejecting linear argument and embracing a fragmented, aphoristic form, 'The Pleasure of the Text' performs what it theorises. Its structure refuses the logic of system and instead models the experience of bliss in its very language. For Barthes, meaning is not imposed from above but emerges in the space between reader and text, in the act of reading itself. Ultimately, Barthes offers not a guide to literature but an invitation: to read differently, to feel language on the skin, to lose and remake the self through textual encounter. His work suggests that the future of reading lies not in mastery or explanation, but in vulnerability, disruption, and the openness to unexpected pleasures.

Empire of Signs

Roland Barthes's 'Empire of Signs' invites readers to encounter a language—not to comprehend or master it, but to experience its resistance, its strangeness, its otherness. For Barthes, the foreign language, particularly Japanese, serves as a mirror that reflects the limits of Western thought and discourse. It is not the utility of communication he seeks, but the unfamiliar terrain where meaning fails to map onto language, where translation becomes betrayal. In this linguistic wilderness, the foundations of one's own language—its categories, its subject-object dualities, its syntactic presuppositions—begin to collapse. This collapse is not a loss but an opening, a destabilisation of what is taken for granted as natural or rational. To know the unknown language is to unlearn one's own. In the Japanese language, Barthes observes, speech does not build from a centred subject who commands discourse. Instead, meaning diffuses through grammatical particles, honorifics, and structural indeterminacy. The subject appears only by indirection, delayed and refracted. The sentence becomes not a linear proposition but a textured surface—a language with volume rather than depth. Fictional characters, too, are not animated by illusion but remain within the frame of signs, reminding readers that narrative is a system of marks, not life. Barthes extends this estrangement of meaning to Zen practice and aesthetics. Zen defies the compulsive Western habit of signification. It does not offer revelation or closure, but confrontation with linguistic limits. Its use of paradox, koans, and haiku suspends the machinery of classification. A haiku does not say more than it seems to; it says less. Its beauty lies in its refusal to become symbolic, in the purity of its form, in its closure that is not depth but silence. The sound of a frog jumping into water, for Basho, is not metaphor but event—a moment where language folds into stillness. The experience of immersion in an unknown culture, especially where language remains opaque, becomes a refuge from the tyranny of meaning. The foreigner, protected by linguistic ignorance, walks in a world of signifiers unburdened by messages. A smile, a gesture, the ritual of bodily presence—these replace speech, and meaning arises from form, rhythm, interaction, not from words. Communication occurs not through semantic transparency but through the play of surfaces, expressions, and cultural codes embodied in the flesh. This is the empire of signs: not a place, but a network of signs detached from fixed reference, where the subject is no longer sovereign, where language is not the mirror of truth but a shimmering field of play. Barthes's Japanese is a fiction—constructed, symbolic, unreal—and yet, in its unreality, it reveals the artificiality of all linguistic systems. It shows how deeply people are imprisoned by their own codes, and how freedom might lie not in discovering meaning, but in its suspension. In this

empire, to read is to dwell in signification without mastery, to drift among gestures, fragments, and silences that escape the grip of interpretation.

4.3. Universal grammar

Avram Noam Chomsky

(Inborn syntax: Mind, language, and the rules within)

'A grammar of any language is a theory of human language'.

— Noam Chomsky, Aspects of the Theory of Syntax

'A language is not just words. It's a culture, a tradition, a unification of a community, a whole history that creates what a community is. It's all embodied in a language'.

— Noam Chomsky, We Still Live Here

Universal Grammar: An Overview

Universal Grammar (UG) is a central theory in modern linguistics, primarily developed by Noam Chomsky, which proposes that the capacity for language is innate and biologically embedded in the human mind. According to UG, humans are born with a set of universal structural principles that underlie all natural languages. These principles serve as constraints on possible grammatical systems, allowing children to acquire complex language rules quickly and with limited exposure. The theory is built on the idea that despite the diversity of languages, their core structures derive from a shared cognitive framework. While UG has profoundly influenced linguistic theory, it remains the subject of ongoing debate and critique. At the heart of UG is the 'poverty of the stimulus' argument, which claims that the linguistic input children receive is insufficient to explain the sophisticated grammatical competence they develop. For example, children learning English can form questions by moving auxiliary verbs, demonstrating an implicit grasp of hierarchical syntactic structure rather than simple linear patterns. This suggests the presence of an inborn template guiding language acquisition. Chomsky's solution to this puzzle is the postulation of a Language Acquisition Device (LAD), a mental mechanism that enables children to infer the rules of grammar from limited input. Various models have been proposed to explain the content and function of UG. The Minimalist Program, a recent development in Chomsky's thought, argues for a drastically reduced UG consisting of simple operations like 'merge', which combines linguistic units hierarchically. Other theories, such as Hagit Borer's Lexical Parameterisation and Optimality Theory, suggest that variation between languages results from different lexical items or ranked constraints, rather than differing grammatical principles. Despite their differences, these models share the conviction that human languages arise from a universal set of cognitive structures. Empirical evidence for UG is often drawn from language acquisition, typology, and creole formation. Derek Bickerton's language bioprogram theory argues that creole languages—emerging from pidgins—show convergent grammatical features, suggesting an underlying universal structure supplied by child learners. However, more recent research indicates that this convergence may reflect cognitive strategies for regularising inconsistent input rather than innate grammar. Neuroscientific studies also provide partial support: imaging experiments show that the brain

processes hierarchical syntactic structures, consistent with UG's predictions. Yet computational models in artificial intelligence have demonstrated that complex linguistic behaviour can sometimes emerge from general-purpose learning algorithms, calling into question whether specific innate structures are necessary. Criticism of UG has grown, especially from functionalist and usage-based perspectives. Critics argue that the theory underestimates the role of interaction, frequency, and general cognitive mechanisms in language learning. The wide variety of linguistic structures found across the world challenges the idea of strict universals. Some researchers also question UG's falsifiability and accuse it of being too insulated from empirical testing. The case of the Pirahã language, studied by Daniel Everett, has been especially contentious, as it appears to lack features thought to be universal, such as recursion. Despite such challenges, UG remains a foundational concept in linguistic theory, particularly within the generative tradition. It has reshaped how scholars think about the mind, cognition, and the nature of language. Whether future research confirms or significantly revises UG, its legacy is assured as one of the most ambitious attempts to explain the human capacity for language in scientific terms.

Logical structure of linguistic theory

Noam Chomsky's 'The Logical Structure of Linguistic Theory' (LSLT), written in 1955 but unpublished until decades later, is the theoretical foundation behind his landmark publication 'Syntactic Structures'(1957). Although most readers were unaware of LSLT when 'Syntactic Structures' appeared, its rigor and depth lent an aura of authority to Chomsky's early claims. One of LSLT's key contributions lies in its reconceptualization of the goals of linguistic theory. Rather than merely cataloguing the grammatical sentences of a language, Chomsky proposed that linguistic theory should explain the deeper structure of language by establishing formal mechanisms capable of generating those sentences. LSLT introduced the tripartite division of grammar into phrase structure rules, transformational rules, and morphophonemic rules. This model framed language as a generative system, capable of producing an infinite variety of sentences from a finite set of rules and principles. In this framework, language becomes a mirror of the mind, and syntax—a computational system—becomes central to understanding cognition. One of the phenomena LSLT addresses is constructional homonymity, where identical phoneme sequences correspond to different underlying structures. For example, the phrase 'the shooting of the hunters' is structurally ambiguous. Its interpretation requires a transformational analysis that can trace the surface phrase back to distinct kernel sentences—either 'the hunters shoot' or 'they shoot the hunters'. Such insights reveal that multiple levels of representation are needed to explain even seemingly simple utterances. This layered architecture—phonemic, morphemic, syntactic, and transformational—enables linguistics to account for ambiguity, similarity, and sentence classification within a coherent formal system. LSLT also engages with the relationship between syntax and semantics but resists collapsing the two into a unified analysis. Chomsky insists that syntax must be developed independently of meaning. He demonstrates that many grammatical structures, such as auxiliaries in questions ('Did John eat?') or function words ('to' in 'to go'), do not carry semantic content in any straightforward sense. Moreover, semantically similar sentences may differ structurally, and vice versa, suggesting that syntactic competence cannot be explained solely by appeal to meaning. Instead, syntax should be treated as an autonomous, rule-governed domain that indirectly supports semantic interpretation. Chomsky's emphasis on formalism and explanatory adequacy in LSLT paved the way for the generative tradition in linguistics. The transformational component of his grammar allowed for deep and surface structures to be linked systematically, and the concept of kernel sentences provided a base from which complex

constructions could be derived. These innovations laid the groundwork for future developments such as government and binding theory and the minimalist program. Though LSLT remained unpublished for decades, its intellectual impact was immediate through 'Syntactic Structures', which distilled its main arguments into a more accessible form. The criticisms about originality and mathematical rigour do not diminish LSLT's profound influence on shaping modern linguistics. It provided the tools and theoretical framework that continue to guide the formal analysis of language today, securing its place as a foundational text in the generative tradition.

Language and mind

Noam Chomsky's 'Language and Mind' presents a foundational view of human language as a formal, innate system deeply embedded in cognitive structures. Chomsky distinguishes between linguistic competence—the internalised knowledge of grammatical rules—and linguistic performance, or how language is used in real contexts, often affected by external factors like memory limitations or social context. Linguistic theory, according to Chomsky, should focus on competence: the mental grammar that enables the pairing of sound and meaning, not just the messy outcomes of speech in everyday life. This internal grammar is structured, rule-governed, and universal. Human languages, despite surface differences, share deep structural similarities governed by universal grammar (UG). UG consists of innate principles that constrain and guide the possible forms a language can take. These principles manifest in phonetics, semantics, and syntax. In phonetics, features like voicing or tongue position are used to construct a universal sound alphabet. In semantics, features such as animacy or agency contribute to meaning. In syntax, deep and surface structures represent the abstract and concrete layers of sentence formation. Chomsky introduces the concepts of deep and surface structures to explain how language operates across multiple levels. Deep structures represent core semantic relationships (like subject and object), while surface structures reflect their expression in speech or writing. For example, 'John is certain that Bill will leave' and 'John is certain to leave' differ in surface structure, but their deeper logical relations are distinguishable through grammatical analysis. Transformations—formal operations that derive surface forms from deep structures—are key to generative grammar. These transformations help account for sentence variations, ambiguity, and meaning. A generative grammar includes syntactic, phonological, and semantic components. The syntactic component generates deep and surface structures; the phonological component converts structures into sound patterns; and the semantic component interprets meaning. Each component follows formal rules, often applied cyclically to progressively larger units, revealing language's recursive and hierarchical nature. These rule-governed systems are evidence of innate cognitive architecture, not just learnt behaviour. Language acquisition, Chomsky argues, depends on the child's ability to select the correct grammar from among many possibilities, using limited and imperfect input. This feat, often referred to as the 'poverty of the stimulus', suggests that children must possess built-in grammatical knowledge—principles of UG—that guide interpretation and rule formation. The implications of Chomsky's theory extend beyond linguistics into philosophy. Questions about mind, knowledge, and meaning intersect with grammatical structure. The interplay between surface and deep structures reflects deeper philosophical issues of reference, belief, and cognitive architecture. While some philosophers like Zeno Vendler have proposed that linguistic theory might offer tools for analytic philosophy, Chomsky is cautious, seeing more value in linguistic findings informing philosophical inquiries than in linguistics serving as a direct method for philosophy. Ultimately, 'Language and Mind' underscores the rationalist view that the mind contains innate structures that shape human understanding. Language

becomes not only a tool for communication but a window into the nature of thought, revealing the deep cognitive principles that make understanding and expression possible.

The Linguistics Wars

Language is both miraculous and elusive—a means by which humans express the most intricate thoughts and construct the most powerful technologies, yet also something so natural that it seems to flow unconsciously, as if by inspiration. This paradox sits at the centre of 'The Linguistics Wars', a history of one of the most contentious intellectual episodes of the twentieth century. Randy Allen Harris chronicles the split that emerged in the 1960s and 70s within the field of generative linguistics, where former allies turned into fierce opponents in a debate that pitted syntax against semantics, and structure against meaning. At the centre of the story is Noam Chomsky, who revolutionised the field by introducing the concept of deep structure. This was the idea that all human languages share an underlying, abstract grammar rooted in the human mind—a generative system capable of producing an infinite number of meaningful sentences. Chomsky's transformational-generative grammar formalised this process by distinguishing between deep structure (the logical, abstract basis of a sentence) and surface structure (its realised, spoken form). Language, for Chomsky, was primarily a computational system of rules, and meaning arose only after syntactic operations had applied. Opposing this model were the Generative Semanticists, led by George Lakoff and others, who argued that meaning was not a byproduct of syntax but its foundation. In their view, deep structures were themselves conceptual—representations of meaning out of which syntax emerged. This reversal of Chomsky's model led to a dramatic confrontation over the nature of language, one that questioned whether linguistic form is shaped by logic and computation or by conceptual and semantic content. The disputes were as personal as they were theoretical. Former students of Chomsky, including Lakoff, broke away from their mentor's paradigm, accusing him of dogmatism and authoritarianism. The arguments extended beyond syntax and semantics into broader issues such as the nature of scientific theory, the role of meaning in cognition, and the very purpose of linguistic analysis. The rift even played out in the pages of scholarly journals, classroom debates, and conference panels, where linguistic arguments often served as proxies for deeper philosophical divisions. One core issue was the 'Katz-Postal Hypothesis', named after Jerrold Katz and Paul Postal, which posited that deep structure determined all semantic interpretation. This aligned with Chomsky's early views, but later he introduced refinements that allowed some semantic content to be derived at the surface, complicating the purity of the earlier model. For Generative Semanticists, this was a retreat; for Chomsky, it was a refinement. The result was an escalating debate over how to best model the relation between thought and language. These tensions were not merely academic. They reflected larger questions about human cognition: Is language an autonomous module in the brain governed by innate principles, or is it an expression of general intelligence, shaped by experience and cultural context? The Linguistics Wars dramatised this epistemological divide and ultimately reshaped the boundaries of linguistics itself. By the late 1970s, Chomsky's revised theory, known as the 'Government and Binding' model, had replaced his earlier transformational grammar. Generative Semantics faded from mainstream linguistics but left an enduring impact, particularly in cognitive science, where Lakoff and others continued exploring the role of metaphor and embodiment in shaping thought and language. The wars left scars but also yielded insights, demonstrating that even the most abstract theories are inseparable from the people and passions that produce them. In recounting this history, 'The Linguistics Wars' is not just a chronicle of intellectual combat—it is an inquiry into what language reveals about the human mind, and how competing visions of knowledge, truth, and meaning play out in the most human of all activities: speech. Wittgenstein

said that one must remain silent about what cannot be spoken. At the top of that list, paradoxically, is language itself. The first and final question of linguistics remains: how can one speak about language using language?

Umberto Eco

(Serendipities and echoes of Babel: Error and the dream of a perfect language)

'All attempts to construct a universal language are expressions of the same desire—to rediscover a lost harmony, a language of the angels'.

— Umberto Eco, The Search for the Perfect Language

'We are not told in what language God spoke to Adam… we must think of a language which… is still… comprehensible to its hearer'.

— Umberto Eco, The Search for the Perfect Language

Language and lunacy

'Serendipities: Language and Lunacy' is a 1998 collection of essays by Umberto Eco, exploring how false ideas have often led to unexpected truths. Translated by William Weaver, the book examines historical misconceptions in linguistics and the Early Modern search for a perfect language, overlapping thematically with Eco's earlier 'The Search for the Perfect Language'. In the preface, Eco defines 'serendipity' as the fortunate discovery born from error. Each chapter unpacks a different example: from Marco Polo mistaking a rhinoceros for a unicorn, to Leibniz interpreting the 'I Ching' as evidence of binary logic, to Joseph de Maistre's theological linguistics. Eco demonstrates how intellectual misreadings and absurd beliefs—while lacking credibility—have nevertheless sparked genuine insights. He traces the cultural mythologies surrounding the Rosicrucians, Knights Templar, and utopian languages, showing how human imagination reshapes the unknown through projection and misunderstanding. Columbus's accidental 'discovery' of the Americas becomes the prime metaphor: an error that revealed a new world. Through wit, irony, and vast erudition, Eco investigates how language, myth, and mistaken knowledge converge. 'Serendipities' is a brilliant meditation on the history of ideas, revealing how the path to truth often winds through illusion and how linguistic fantasies have shaped human understanding. Throughout history, language has often been shaped not only by rigorous analysis but also by error, invention, and illusion. Many of the most influential linguistic ideas have emerged from misunderstandings, fictional constructs, and speculative attempts to rediscover or recreate a perfect language. Despite their flaws, such efforts have offered valuable insights into how natural languages function and how humans relate to the idea of meaning itself. The belief in an original, divine language has driven centuries of linguistic speculation. Attempts to reconstruct the language of Paradise or Babel reflect a persistent hope that language once possessed absolute clarity and unity. These projects, though often rooted in theological or mythic traditions, reveal more about cultural imagination than historical fact. Even when misguided, they clarify why living, evolving languages—precisely because of their imperfections—are more adaptable and expressive than artificially constructed systems. Fictional languages, invented to parody or critique linguistic utopias, often expose the limitations of idealisation. They reflect anxieties about universality, control, and the desire for linguistic purity. At the same time, absurd or reactionary theories, including those based on mystical etymologies or ideological distortions, show how language can be

manipulated to reinforce dogma or obscure meaning. Misreadings and mistranslations have further distorted ideas about language's origins and structure. A poetic vision of a primordial tongue can be mistaken for theological certainty when filtered through flawed interpretations. This reveals how language is never fixed but always mediated by context, tools, and beliefs. The history of language is also the history of these distortions, reinterpretations, and projections. What appears foolish or erroneous in one era may provoke insight in another. Mistaken theories often illuminate the real conditions of linguistic change, adaptation, and survival. The very failure of perfect languages highlights the strengths of imperfect ones. The dynamic, shifting nature of language resists complete control or absolute definition, yet continues to serve as a powerful instrument of human thought and community. Ultimately, language is not only a means of communication but also a mirror of imagination, ideology, and cultural memory. It is shaped as much by myth and mistake as by clarity and logic. In this tension lies its enduring mystery and vitality.

The search for the perfect language

'The Search for the Perfect Language' (1993) is Umberto Eco's exploration of historical efforts to create an ideal, universal language. Framed through the myth of Babel, the book connects linguistic invention to broader social and cultural currents. Written in an essayistic style, it traces how the dream of a perfect language has always been entangled with ideological ambitions—religious, philosophical, and political. While acknowledging that this ultimately futile pursuit has led to occasional useful insights, Eco focuses primarily on the more curious and imaginative proposals that reflect humanity's persistent desire to overcome linguistic fragmentation. Language, in its mythic origin, begins not with humanity but with divinity. In Genesis, the first creative act is verbal—'Let there be light'. The universe is summoned into being through utterance, and the world is structured by naming. This divine speech implies that language precedes creation, functioning not as a human tool but as a sacred force. When Adam appears, he is invited into this divine function by naming the animals—an act both of language and of dominion. Whether Adam discovered their true names or invented them remains unclear. The ambiguity reflects a deeper tension in the human relationship to language: is it revelation or invention? Adam's naming of Eve—'ishha', or 'virago', and later 'Chava', 'mother of all living'—reinforces the sense that names once had direct ties to essence. Language, in its original form, was transparent, meaningful, and unified. But this unity is ruptured at Babel. In Genesis 11, humanity—still speaking one language—attempts to ascend to heaven by building a tower. The divine response is not only architectural disruption but linguistic confusion. God scatters speech itself, breaking the possibility of shared understanding. Babel becomes the myth of fragmentation—the 'confusio linguarum' that haunts all human attempts at perfect communication. Yet, Genesis 10 complicates this rupture. It already shows the postdiluvian world as linguistically diverse, suggesting that language change may also be natural, not purely punitive. This subtle dissonance reflects an ongoing human ambivalence: is linguistic multiplicity a curse or a richness? In classical thought, language was both a philosophical and political tool. While the Greeks dismissed foreign tongues as 'barbaroi', they also reflected on whether words are natural or arbitrary. Plato's 'Cratylus' and Aristotle's logic infused Greek with a privileged aura, later inherited by Latin. As empires expanded, language became a unifying code—koiné Greek and Latin serving to bind peoples under a common tongue. Later, Christian Europe sanctified the trilingual inscription on the Cross—Hebrew, Greek, and Latin—turning these into vessels of divine truth. Still, post-Roman fragmentation revived vernaculars and linguistic pluralism. Even this chaos inspired hope: Irish grammarians claimed their Gaelic to be a synthesis of all others, while mystics, cabalists, and humanists sought to

retrieve or reconstruct Edenic speech. From medieval fantasies of Hebrew purity to Enlightenment projects of logical languages, the desire for linguistic perfection remained. Universal languages were proposed to overcome ambiguity, unify knowledge, and eliminate misunderstanding. Some were symbolic, others gestural. All sought a language that would restore a lost unity between word and world. In modernity, this dream shifted into science. Monogenetic theories, genetic linguistics, and even artificial intelligence took up the search. Languages like Lincos, designed to communicate with extraterrestrials through mathematics and logic, carry forward the longing for a pure, universal code—unmediated by history, culture, or error. Yet this pursuit hides a dangerous paradox. The perfect language promises understanding, unity, even peace. But it also promises total transparency, surveillance, and control. A language without ambiguity is a language without resistance. When speech is fixed and meaning predetermined, freedom of interpretation vanishes. What begins as the desire to overcome Babel ends in the spectre of a single voice speaking for all. Thus, the perfect language is not merely a philosophical dream—it is also the blueprint for a perfect system of power. In its pursuit, humanity risks exchanging the chaos of misunderstanding for the tyranny of absolute clarity. What seems like utopia may instead be the architecture of total domination. The pursuit of a perfect language can be likened to the pursuit of the ultimate weapon—both aim for total precision, absolute control, and the elimination of ambiguity, often at the cost of freedom.

A Felix Culpa

For Umberto Eco, the myth of Babel, often interpreted as divine punishment for human pride, can instead be seen as a 'felix culpa'—a fortunate fall that opened the path to linguistic diversity and cultural richness. Rather than a loss, the confusion of tongues represents an opportunity: a call to explore, adapt, and understand the world in multiple ways. Language fragmentation becomes the source of creativity, not chaos. The myth reframed in this way celebrates the proliferation of languages as a necessary condition for the expansion of thought, identity, and mutual understanding. The gift of tongues, as described in the New Testament, deepens this reinterpretation. In 1 Corinthians, Paul speaks of 'glossolalia'—a spiritual language transcending normal speech, while Acts offers the spectacle of 'xenoglossia', where each apostle speaks foreign tongues understood by all listeners. These accounts suggest a temporary return to pre-Babel unity, not by restoring a single language, but by allowing each person to be heard in their own. Rather than undoing diversity, the miracle honours it. Language becomes not a tower to collapse, but a bridge to build. This view aligns with the thinking of medieval thinkers like Ibn Hazm, who believed God originally gave humanity a perfect language. In this language, each thing had one name, and each name pointed clearly to its referent. Yet Ibn Hazm acknowledged linguistic ambiguity—not as a flaw, but as a feature. Synonyms and homonyms, when used properly, enriched rather than confused communication. He rejected the idea that languages formed by convention, insisting instead on a divinely given tongue from which all others descended. Importantly, the Qur’an treats the division of languages as natural, not punitive. All languages are seen as echoes of the original, and every tongue can express divine truth. Arabic, as the language of revelation, is not superior but fitting—chosen for a purpose, not for purity. This vision reframes multilingualism as a sacred legacy. The original language was not a single speech but a matrix—a potentiality for all possible languages. The story becomes one not of loss, but of unfolding: an infinite spectrum of speech gradually emerging from one luminous source. In this light, Adam’s role as the first speaker gains symbolic weight. His naming of the animals was not the completion of a linguistic task, but the beginning of an unfinished apprenticeship. The Fall interrupted his mastery of divine language, and the human condition became one of striving—trying to recover or recreate fragments of that original

tongue. Each language, then, carries a sliver of the first, and every act of translation becomes a small reconciliation between divided forms of truth. The Babel myth, reconsidered, does not call for erasing linguistic differences in the name of unity. It demands the opposite: honouring difference as the path to deeper unity. The 'curse' is the condition of possibility. The rupture becomes the origin of connection. A 'felix culpa'—fortunate because it multiplies the ways humanity can mean, understand, and share. In embracing linguistic plurality, people do not fall further from grace, but move closer to the divine richness embedded in human communication.

Computer languages as a priori systems

Umberto Eco, in 'The Search for the Perfect Language', examines the historical pursuit of a priori languages—systems constructed from foundational principles to achieve clarity and universality. Though he does not explicitly equate these philosophical languages with modern computer languages, his analysis offers a useful framework for understanding both. Whether ancient or contemporary, these constructed languages share a common goal: to create structured, logical systems for representing knowledge and facilitating precise communication. Eco's work highlights how the desire to overcome the ambiguities of natural language continues to shape linguistic invention, from theological speculation to computational design. Computer languages can be seen as modern echoes of the philosophical dream of a priori languages—systems built from foundational principles to ensure clarity, precision, and universality. Unlike natural languages, which evolve organically and are rich in ambiguity, metaphor, and cultural nuance, programming languages are engineered for exact interpretation. Their syntax is rigid, their semantics formal, and their structures—*if…then*, *while…do*—mirror logical deduction more than human dialogue. These languages achieve a limited universality: a Pascal program can be read and understood by programmers across cultures because it relies not on shared spoken language but on formal logic. In this sense, they avoid misunderstanding by design. Yet this clarity is achieved through severe constraints. Rooted in Western logical traditions, these languages are ill-suited to express ambiguity, metaphor, or emotional complexity. Their strength is also their blindness: what they omit is precisely what gives natural language its depth. The philosophical roots of this impulse run deep. From Boole and Frege to Russell and Wittgenstein, many sought languages that map reality with unerring accuracy. Logical positivists envisioned a purified language of science, while cognitive scientists proposed a 'mentalese', a code-like inner language mirroring computation. These ideals also shaped early AI and continue to influence efforts toward artificial general intelligence. Yet history warns that precision alone does not yield expressive power. Computer languages, though exact, remain bound to machines. They are not perfect languages, but the clearest manifestation yet of the human desire to master meaning through form. Seen this way, the search for a perfect language is not a return to Eden, but a dangerous temptation to reverse the very gift that Babel bestowed. To long for one language, pure and universal, is to risk erasing the diversity through which meaning thrives. A single, total language—like Adam's before the Fall—may seem divine, but imposed in a fallen world, it becomes a tool of domination. The more perfect the language, the greater its capacity to control, to exclude ambiguity, and to silence dissent. In this light, the desire for linguistic purity mirrors the desire for absolute power. What began as a sacred act of naming becomes, when completed too fully, a closing off possibility. The true inheritance of Babel is not confusion, but complexity—a reminder that language is not something to be perfected, but something to be lived with, translated, and continually reimagined.

5. PARADIGMS OF COMMUNICATION

5.1. Power and control

(Narratives of domination and architecture of consent)

'The smart way to keep people passive and obedient is to strictly limit the spectrum of acceptable opinion, but allow very lively debate within that spectrum'.

— Noam Chomsky, The Common Good

'Power produces knowledge... power and knowledge directly imply one another'.

— Michel Foucault, Discipline and Punish

'Communication of power' is the old paradigm of imperial and totalitarian civilisations where communication serves as a tool of domination and surveillance. Ruling ideas are authored by educated elites to preserve order, shape ideology, and legitimise authority. All media channels are instruments of central power, constructing a singular narrative under the illusion of universal truth. It is the paradigm of manufactured consent: one language, one truth, one voice—'ours'. The main goal of the totalitarian language in this paradigm is the manufacture of 'we'- an artificial feeling of unity and a conspicuous form of collective consent. The study of communication developed not as a branch of linguistics or philology but as a tool of political science and sociology, primarily concerned with power, control, and influence. The very term 'communication' came to be understood less as a mutual act of understanding or communion, and more as the strategic transmission of messages to shape opinion and behaviour across populations. Communication has not always been about sharing. In ancient courts and totalitarian states alike, it functioned as a weapon. Messages issued from on high, edicts carved in stone, every word sanctioned by those who ruled. The aim was simple: order, ideology, and authority. Dissidents risked exile; scholars risked silence. Language became a map drawn by dominant classes, marking off who could speak and who must listen. The study of communication shifted focus from understanding to control. It was no longer just the analysis of syntax or meaning but an investigation into how messages are crafted to influence societies. Five core questions emerged: who crafts the message, what is said, through which medium, to whom, and with what effect. These questions broke speech into discrete fields—control of the communicator, analysis of content, study of the medium, understanding of the audience, and assessment of impact—each tracking how language shapes collective life. Three core functions of societal communication were identified: monitoring the environment to alert to threats and opportunities; interpreting and contextualising signals to coordinate responses; and transmitting shared values and practices across generations. As these analytical tools took hold, a new industry arose around shaping public perception. What had once been a cautionary lesson about manipulated belief became a professional playbook. Propaganda techniques were refined into strategic messaging, emotional appeals, and staged events—presented as essential to guiding opinion in large, complex societies. Consent came to be seen not as an authentic agreement but as something that could be engineered, managed, and measured. At the same time, a deeper critique revealed that language itself is never neutral. Its power depends less on grammar or clarity and more on who wields it and under what circumstances it is received. Competence in communication emerged as a combination of social intuition and institutional backing, not merely correct usage. Educational systems, legal codes, and cultural gatekeepers valorised one

form of speech while stigmatising others, creating a symbolic marketplace in which certain voices carried material and social advantages. Those with access to the dominant language accrued symbolic capital like advantages in education, employment, and social standing. At the same time marginalised groups adapted their speech or remained silent. Even as more humanistic approaches called for dialogue and shared meaning, the dominant model continued to treat communication as a one-way transmission. Efficiency, surveillance, and ideological reproduction remained the priority. Research programs aligned with statecraft and market strategy, sidelining the messy give-and-take of everyday conversation in favour of streamlined message delivery. This chapter traces the old paradigm of communication: the intertwining of power and control. It shows how imperial courts and modern regimes alike wielded language to dominate, how the academic framing of communication as a tool of influence replaced earlier notions of communal exchange, and how symbolic power is distributed, regulated, and contested. From carved edicts to televised broadcasts and algorithmic feeds, the story is the same: our language, our narrative, our voice. Yet beneath every broadcast tower and data filter lie hidden fractures. Every dissenting whisper, every underground pamphlet, every encrypted chat reminds us that no script of power can hold unchallenged forever. Can communication ever escape its role as a tool of domination and become a true space for genuine communion?

Lippmann and Dewey: Democracy and communication

In the early twentieth century, Walter Lippmann and John Dewey confronted a central problem of modern democracy: the role of communication in a society shaped by industrial complexity, mass media, and intellectual fragmentation. Their debate unfolded as a conflict between two opposing visions—Lippmann's sceptical technocracy and Dewey's hopeful participatory democracy—each wrestling with the limits of human rationality and the possibilities of public discourse. Lippmann argued that people do not perceive the world directly but through internal representations. These mental filters create a pseudo-environment that distorts judgment, influenced by media simplifications, personal bias, and systemic constraints. Democratic theory, according to Lippmann, naively assumes that individuals are well-informed and capable of rational self-governance. Yet media outlets often reinforce stereotypes and prioritise sensation over truth, driven by commercial pressures rather than public interest. To address this gap, Lippmann proposed delegating the interpretation of complex issues to a specialised class of experts, tasked with generating accurate knowledge for decision-makers. The democratic process, in this vision, becomes one of periodic consultation through elections, rather than continuous public deliberation. The role of science is instrumental—useful for managing society but no longer carrying the salvific aura it once had. Lippmann, influenced by Nietzsche and Freud accepted the instability of knowledge and the irrational nature of consciousness, which made the dream of a fully rational public illusory. Dewey, in contrast, viewed democracy not as a fixed structure but as an evolving way of life grounded in communication and community. He argued that the public had been eclipsed by industrial forces that disconnected individuals from the consequences of collective action. Yet he maintained that people could reconstruct their public identity through shared experience and communication. For Dewey, the failure of democracy stemmed not from inherent irrationality but from broken channels of communication. While Lippmann separated facts from opinions to protect objectivity, Dewey saw this division as an ideological tool that empowered elites to define truth. For him, the validity of knowledge was not found in abstract standards but in its consequences for those affected. Science, therefore, should not be an autonomous realm above society but an instrument of reflective inquiry rooted in lived experience. Truth was not discovered in isolation but co-created in dialogue. Dewey believed in reforming the press to

foster a more informed and participatory public. Journalism, in his model, was not merely a conduit of facts but a facilitator of debate and mutual understanding. Lippmann acknowledged the media's flaws but doubted its reformability; he feared that democracy without guidance would degenerate into irrationality, manipulated by demagogues and propagandists. Their divergence extended to the function of social science. Lippmann, disillusioned by the relativity of knowledge, still valued science for its capacity to reduce social violence through informed administration. Dewey embraced the relativity of truth as a democratic opportunity, challenging who gets to define what counts as knowledge and whose interests it serves. This debate continues to resonate. Lippmann's concern with distortion and elite manipulation remains relevant in an era of disinformation and algorithmic influence. Dewey's insistence on the ethical and communal dimensions of democracy challenges technocratic and media-driven forms of control. Both recognised that communication shapes perception, and thus power, but differed on whether that process could or should be democratised. Lippmann feared that without expert intervention, the public would remain a 'phantom'- incapable of reasoned judgment. Dewey responded that people become capable through the very act of communicating—through shared inquiry, mutual responsibility, and lived participation. The future of any society, in this light, depends not on reducing public voice but on renewing the conditions under which it can speak meaningfully. The tension between expert-led interpretation and participatory dialogue is enduring. How might today's democracies craft communication channels that both inform effectively and empower citizens to co-create their collective future?

Harold D. Lasswell: Function of communication

In his 1948 essay 'The Structure and Function of Communication in Society' Harold D. Lasswell offered one of the earliest comprehensive models for understanding communication in complex societies. His formulation—'Who says what, in which channel, to whom, with what effect?'—broke communication into discrete but interdependent components. Rather than treat communication as a passive flow of information, Lasswell identified it as an active process embedded in systems of power, shaped by intention, structure, and outcome. Each of the model's five elements opens a distinct analytical pathway: the communicator corresponds to control analysis, the message to content analysis, the medium to media analysis, the audience to audience analysis, and the effect to impact assessment. This structure provided early communication scholars with a flexible but systematic way of evaluating how messages function in society, and what broader social roles communication serves. Lasswell identified three core societal functions of communication: surveillance, correlation, and cultural transmission. Surveillance involves monitoring the environment and alerting communities to threats and opportunities. Correlation interprets and contextualises these signals, coordinating responses and maintaining social equilibrium. Cultural transmission ensures the continuity of shared values, knowledge, and social practices over generations. These functions are not just technical—they are mechanisms through which a society reflects on itself, maintains order, and reproduces its norms. Lasswell analogised these functions to the biological operations of an organism: just as sensory and nervous systems gather and respond to information, societies depend on institutions like journalism, education, and diplomacy to absorb, process, and distribute knowledge. These agents operate within communication networks, some symmetrical and reciprocal, others centralised and hierarchical. Big cities operate as global attention nodes, shaping and redistributing information within wider geopolitical systems. Yet mass communication does not unfold in a vacuum. Power, wealth, and prestige affect who speaks, who listens, and whose messages are amplified. Political regimes manipulate communication to serve ideological interests. Media ownership structures privilege certain narratives while

marginalising others. The concentration of communicative power distorts public understanding and reinforces social stratification. Lasswell emphasised that understanding communication's role in democracy, requires attention to these underlying asymmetries. Communication systems can fail. Ignorance—whether from lack of access or misinformation—disrupts informed decision-making. Distortion, especially through propaganda or strategic manipulation, misrepresents facts for ideological or commercial gain. Technical limitations, from infrastructural deficits to inefficient media channels, further hinder effective discourse. Lasswell argued that overcoming these breakdowns required both media reform and public enlightenment—what he termed 'equivalent enlightenment', where citizens and leaders share enough mutual understanding to sustain rational governance. In authoritarian contexts, communication often becomes a tool of dominance—surveillance, censorship, and propaganda reinforce state authority while stifling dissent. But even in democratic societies, communication can reproduce inequality unless efforts are made to ensure transparency, access, and accountability. Lasswell believed that communication should serve as a democratic corrective, not simply a mirror of power. Ultimately, Lasswell's work placed communication at the heart of social order. It is a structuring force that reflects, reproduces, and contests the values and institutions of a society. By analysing its structure and functions, one sees that communication is not merely about transfer of information. It is about meaning, legitimacy, and the ongoing negotiation of collective life in an era of concentrated media power and algorithmic curation. How can we ensure that communication's roles in surveillance, correlation, and cultural transmission genuinely support democratic engagement rather than undermine it?

Walter Lippmann: Defense of civility

In 'Essays in the Public Philosophy' (1955), Walter Lippmann presents a defence of civility grounded in the revival of a shared moral order. He begins by restating the foundation of social life: the 'public philosophy'. This tradition, developed over centuries, asserts that liberty, law, and reason must guide both governors and the governed. These principles, he argues, have historically upheld free institutions by affirming that no one is above the law, and that rational discourse should inform collective life, not emotional impulse. Lippmann warns that modern democracies have grown detached from this foundation. Liberal democracy, he contends, has become directionless in the absence of a coherent civic ethos. In place of shared convictions, societies face ideological confusion. The rise of authoritarian systems, unified by conviction and purpose, contrasts sharply with democracies that lack resolve and clarity. For democracy to endure, its legitimacy must rest on something deeper than procedural formality—it must be rooted in belief. Reviving the shared ethical tradition, according to Lippmann, is both necessary and possible. He insists that when applied to issues like sovereignty, property, education, and speech, the shared philosophy provides coherence and rational guidance. However, the challenge lies in adapting ancient principles—formed before mass societies and industrial modernity—to the complexities of contemporary life. Without this adaptation, democratic societies risk being overtaken by movements that exploit their moral vacuum. A central obstacle to this revival is the difficulty of communicating the guiding philosophy in an age dominated by positivism. The modern worldview trusts only what is measurable and empirical. Concepts like justice, truth, and obligation appear irrelevant or unreal. The public philosophy demands loyalty to intangible ideals, yet modern minds resist what cannot be observed or quantified. Abstract principles seem distant from daily experience. Lippmann observes that throughout history, societies have responded by materialising ethical ideals. These are transformed into visible, symbolic forms. Gods, laws, and constitutions have served to embody higher truths, making them intelligible and authoritative. Constitutional systems, for

instance, give form to invisible obligations. They translate the moral necessity of order into lived political structures, binding individuals together under a common framework. Still, this accommodation has limits. The materialisation of ideals cannot resolve irreconcilable value conflicts. Civility is not mere tolerance but a shared commitment to transcendent principles. Historically, this commitment found expression in the doctrine of natural law—an order believed to bind rulers and citizens alike. Whether expressed in divine or rational terms, it offered a universal reference point. Lippmann sees the rejection of such a foundation as the root of modern crisis. Thinkers like Nietzsche and Sartre, by denying objective truths, replaced shared values with personal will. Ethics became subjective, and civility lost its anchor. Without assent in a common reality, politics devolves into a battle of competing private meanings. The result is intellectual anarchy and democratic disintegration. For Lippmann, the responsibility falls on philosophers—the 'teachers of teachers'—to guide public thought. By abandoning relativism and reaffirming rational inquiry, philosophers can help restore public confidence in universal principles. They cannot rule, but they can provide the vision that sustains rule. The core problem is legitimacy. Philosophers must be the ones to 'manufacture consent', not the journalists. Democracies cannot survive without faith in a real and objective moral world. Lippmann ends with a call to recover what he calls the 'mandate of heaven'—a conviction that justice and reason are not illusions but part of the natural order. Without this conviction, democratic societies lack the will to resist tyranny and fragmentation. The defence of civility, then, is ultimately a defence of the existence of truth. Can contemporary democracies rediscover a shared foundation strong enough to uphold civility in an age that prizes only what can be measured?

Edward L. Bernays: Crystallised public opinion

In 'Semantic Tyranny: How Edward L. Bernays Stole Walter Lippmann's Mojo and Got Away With It[142]' (2013) Sue Curry Jansen claims that Edward L. Bernays, often celebrated as the 'father of public relations', built an empire of persuasion by twisting the ideas of Walter Lippmann, one of the most thoughtful critics of propaganda in democratic life. In 'Public Opinion' (1922), Lippmann warned against the dangers of media manipulation and the fabrication of collective beliefs. He viewed the 'manufacture of consent' as admission that people form opinions based on distorted symbols, not reality. Bernays, in 'Crystallising Public Opinion' (1923), turned this critique into justification, claiming Lippmann as a theoretical ally in the development of public relations as a strategic industry. This misappropriation was not an accidental misreading but what Sue Curry Jansen calls 'semantic tyranny'. Bernays rebranded Lippmann's critique of political distortion as an endorsement. Where Lippmann saw cognitive limitation, Bernays saw a market opportunity. Through selective citation and contextual erasure, he portrayed Lippmann's scepticism about the role of press agents and image-makers as support for their necessary function in modern society. According to Bernays, manipulating symbols and crafting public perception were not dangers to be avoided but tools to be perfected. Propaganda became a science, and Lippmann—wrongly—became its intellectual patron. Bernays' sleight of hand was effective and enduring. By cloaking public relations in the language of democratic facilitation, he gave it a moral and intellectual veneer. His later essay, 'The Engineering of Consent', formalised this worldview. Bernays described persuasion as a

[142] Jansen, S.C. (2025). Semantic Tyranny: How Edward L. Bernays Stole Walter Lippmann's Mojo and Got Away With It and Why It Still Matters. International Journal of Communication, [online] 7(0), p.18. Available at: https://ijoc.org/index.php/ijoc/article/view/1955 [Accessed 31 Jul. 2025].

natural extension of free speech, reframing propaganda as responsible leadership in a mass democracy. According to him, modern media created a fragmented public consciousness, and only trained experts could manage its coherence through careful messaging, symbolic events, and emotional appeals. Lippmann, however, had aimed for the opposite. He called for institutional reforms, objective knowledge systems, and a more reflective public sphere. He did not dismiss the masses but questioned whether unfiltered public opinion could function as the foundation of policy in a media-dominated environment. For him, the answer lay in improving the conditions for judgment, not exploiting their deficiencies. Bernays converted this anxiety into a professional playbook. But Lippmann never embraced propaganda as a solution; he saw it as a structural flaw in mass communication. Bernays' version of public relations became a model for controlling public consciousness, while Lippmann's work remains a warning about that very control. One endorsed symbolic engineering as democratic maintenance; the other feared that such tactics undermined the very meaning of civic choice. To overcome the semantic tyranny and restore public transparency, Lippmann must be recognised not as the architect of modern propaganda but as its critic. The fight over public opinion is not just about techniques—it is about truth, ethics, and the legitimacy of influence in an age of semantic conquest. In a world where propaganda is dressed up as public service, can we reclaim the true spirit of democratic discourse? Who will dare to resist the semantic tyranny that turns citizens into consumers of engineered consent?

James W. Carey: Communication as culture

James W. Carey's cultural approach to communication begins with a modest yet profound observation from John Dewey: 'Of all things communication is the most wonderful'. In 'Communication as Culture[143]' Carey uses this remark not as a rhetorical flourish, but as a gateway into a deeper understanding of communication—not simply as the transmission of messages, but as the fabric of shared life. For Carey, communication is how societies exist, sustain themselves, and create meaning. It is not just something that happens in culture. Communication is culture and language is we. Carey distinguishes between two fundamental models of discourse that have shaped Western thought. The 'transmission view' understands symbolic exchange primarily as the sending of information across distances for control and influence. This model, rooted in religious and colonial histories, persists today in political campaigns, education systems, and media industries. It treats communication like transportation: efficient, linear, and outcome-driven. Whether in the form of telegraphs or social media, the goal remains the same—movement of information toward specific ends. The 'ritual view', in contrast, sees communication as a process of maintaining society through participation. Its roots are found in older religious practices—ceremonies, storytelling, and collective rites—where meaning is not transmitted but enacted and renewed. From this perspective, reading the daily newspaper is less about gaining new information and more about participating in a cultural ritual that reaffirms common values and binds people into a community. It dramatises the world, reinforcing a sense of order, belonging, and symbolic coherence. Carey argues that Dewey's philosophy holds both views in tension, but ultimately affirms the ritual model as more foundational. Dewey saw communication not as the mere exchange of data but as the creation of a shared world. Carey takes this insight further by proposing a definition of communication as a symbolic process through which reality is

[143] Carey, J.W. (2008). Communication as Culture, Revised Edition. Routledge.

produced, maintained, repaired, and transformed. In other words, communication is how people make a world together. Reality, for Carey, is not fixed or external—it is a construct shaped by symbols. Language, maps, rituals, and stories are not just representations of reality; they are tools for shaping and sharing it. A map does more than reflect geography—it influences how space is imagined and traversed by whoever can read the map. Similarly, public discourse does not simply report facts; it generates frameworks for interpreting those facts. Communication builds the scaffolding of common sense inside an interpretive community. This symbolic world is always in flux. As generations shift and conditions change, symbols must be maintained, adapted, or reinvented. Carey sees communication as the ongoing work of cultural repair, a process of making meaning amid disorientation and uncertainty. Thought itself, he insists, is social and public, not private. People think with mutual symbols, and their understanding of the world depends on collective representation. Studies, then, should not merely analyze how messages are delivered but examine how reality is constructed through cultural forms—art, religion, science, journalism—and how technologies mediate and reshape these forms. Models of communication are never neutral. The dominance of the transmission model has shaped societies around control, efficiency, and hierarchy. It has also narrowed education, urban design, and technological innovation to serve institutional power rather than cultural connection. Carey calls for a reorientation of theory—away from control and toward communion. By recovering the ritual view, scholars and citizens alike can begin to rebuild public life through practices that foster communal meaning and social imagination. Communication, in this sense, becomes a form of cultural stewardship, preserving the symbolic worlds people inhabit while making space for renewal and transformation. Can we shift from a transmission model of efficiency and control toward a ritual understanding of communication?

Pierre Bourdieu: The symbolic power of language

Pierre Bourdieu's theory of language challenges the illusion that words derive their power from internal structure or semantic clarity. In 'Language and Symbolic Power', he argues that language is not an autonomous system of signs but a social practice embedded in power relations. Its effectiveness and legitimacy depend less on grammar than on who is speaking, in what context, and under what conditions of recognition and authority. Language, for Bourdieu, is never neutral; it is always a medium of symbolic struggle. Bourdieu critiques the legacy of structural linguistics, particularly its tendency to isolate language from its social environment. Inspired by Saussure, structuralism reduced language to an internal system, bracketing out historical, political, and social forces. This abstraction lent linguistic analysis an aura of scientific purity but concealed the power dynamics that shape linguistic practice. Saussure's own recognition of language's 'social nature' was largely ignored by followers who favoured formalism over context. To restore the social dimension of language, Bourdieu introduces the concept of the 'linguistic market'. Just as economic value depends on context and demand, so too does the value of speech depend on the social setting in which it is uttered. An utterance carries weight not simply because of what it says but because of who says it, to whom, and with what institutional backing. Language is not merely a code to be decoded; it is a field of symbolic exchanges, governed by inequalities in access, recognition, and legitimacy. The speaker's capacity to speak—what Bourdieu calls 'linguistic habitus'—is shaped by their position within social structures. Competence involves more than grammatical correctness; it includes the social intuition to speak appropriately in context. This competence is unequally distributed, shaped by class, education, and socialisation. Institutions such as schools help reproduce this inequality by teaching and valorising the dominant language while stigmatising regional dialects or non-standard speech. The result is symbolic domination: those who control

legitimate language exercise power without needing overt coercion, since dominated groups often internalise their own marginalisation and adapt their speech accordingly. Linguistic capital functions like economic capital, yielding advantages in social interactions, education, and employment. The recognition of 'proper' language carries material and symbolic rewards, reinforcing the hierarchy of linguistic forms. Literary institutions, grammarians, and bureaucrats codify and preserve the dominant language, shaping not only how people speak but how they think and understand their place in society. Even the distinction between 'style' and 'error' reflects this dynamic, as stylistic appreciation depends on the audience's training and recognition. Language's polysemy—its capacity to carry multiple meanings—makes it a potent tool for ideological manipulation. Political and religious discourses often use familiar words to bridge social divides or mask deep antagonisms. In revolutionary moments, words may flip in meaning, exposing language as a site of struggle. The more unified the linguistic market becomes, the more intense the contest over meaning. Ritual and legal discourse reveal language's performative power. When uttered under the right conditions by an authorised speaker, language can create social realities—marriages, laws, verdicts—through words alone. However, this dominance depends on institutional structures and collective belief. The same sentence uttered without authority falls flat. Bourdieu thus expands J.L. Austin's notion of the performative: the success of performative language hinges on recognition, institutional delegation, and audience complicity. The illusion of linguistic equality—promoted by ideals of language as a communal treasure—conceals the structures that produce and legitimise dominant forms. Educational and political institutions reinforce a standardised language, marginalising others and shaping perceptions of correctness and intelligence. This codification of language serves bureaucratic needs and sustains the symbolic authority of the state. Naming is the most explicit form of symbolic power. The act of classification—assigning names, titles, or roles—is never neutral. It organises the social world and legitimises certain perceptions while excluding others. This extends from academic titles to everyday insults, all functioning to institutionalise identities. Official naming wields durable symbolic efficacy because it is collectively recognised and often internalised by those it defines. Bourdieu's analysis reveals language as a central instrument of symbolic domination. To study language sociologically is to illuminate how power moves through words, names, accents, and silences. The legitimacy of speech is not given—it is produced, policed, and perpetuated through social rituals, educational systems, and political authority. Recognising this dynamic is essential for any critique of ideology, culture, or communication. Language, far from a transparent medium, is the battlefield where social distinctions are made, unmade, and remade. It is a field of symbolic struggle governed by social recognition and institutional backing. How might we contest and redistribute this power to create a more equitable linguistic landscape?

Manuel Castells: Networks of language and power

In 'Communication Power[144]' (2009), Manuel Castells argues that communication constructs meaning, structures our perception of reality, and serves as a fundamental source of power. It is not merely an exchange of information but a material process rooted in the mind, where neural patterns form mental images in response to bodily states, learnt associations, and environmental stimuli. Consciousness emerges when these images align with one's sense of self, allowing for directed attention and coherence. Meaning is not passively received from the world but actively constructed within the mind. This construction involves organising experience through symbolic representation. People rely on metaphors, grounded in bodily

[144]Castells, M. (2009). Communication Power. Oxford: Oxford University Press.

experience, to transform internal representations into language. Language then structures attention, encodes values, and guides behaviour. It extends the inner life into a shared domain, forming culture and shaping perception. Emotional responses help focus exchange by linking memories with signals that prioritise relevance and action. Mirror neurons reveal the inherently social nature of communication. These neurons enable individuals to simulate and understand others' actions and feelings, forming the neurological basis of empathy, cooperation, and symbolic interaction. Through shared representations, humans coordinate behaviour, imitate, and generate abstract concepts. Discourse thus becomes a framing mechanism that shapes how reality is perceived, filtered, and interpreted. Framing selects and emphasises aspects of reality while excluding others. Media, institutions, and individuals use frames to influence understanding and decision-making. Agenda-setting and priming reinforce this by determining what is noticed and how it is evaluated. Framing operates through resonance with existing cognitive patterns, embedding external narratives into internal mental structures. Media systems function as gatekeepers and programmers of these narratives. Power is exercised not only through coercion but through control over the production and distribution of meaning. According to Manuel Castells, the network society is defined by the capacity to shape meaning through mass media that allow individuals to produce and share their own messages. Wars illustrated how strategic framing can realign public perception. The phrase 'war on terror' became a linguistic weapon, channelling emotions, shaping beliefs, and manufacturing political support. Control over language shaped reality itself. Even physical violence required prior justification through a dominant frame. Meaning, in this sense, precedes action. In cases where institutions lose credibility due to corruption or systemic failure, communication frames unravel, exposing the fragility of authority. Global conflicts rooted in ethnicity, religion, or nationalism are not simply struggles over resources but battles over symbolic meaning. Language, imagery, and ritual become weapons of political violence, reshaping collective consciousness through spectacle and fear. Networks do not generate dominance on their own. It is those who design, program, and frame communication who shape public discourse. As digital platforms weaken centralised control, discourse becomes more open but also more vulnerable to market pressures and surveillance. Power today lies in programming meaning. Counterpower emerges through reprogramming—creating new frames, metaphors, and narratives. Social movements and independent creators use language to challenge dominant networks and circulate alternative interpretations. These efforts constitute internal rewiring, a struggle not for control over bodies, but for control over signs and symbols. Communication intersects with politics, economics, and culture, forming interlocking meta-networks. Power is amplified through switching—aligning various systems for mutual benefit. Media moguls exemplify this ability to connect media, finance, and politics into a single apparatus. Resistance, in turn, requires building autonomous spaces, where meaning can be renegotiated beyond elite control. In the network society, communication is the main architecture of power. Whoever defines the symbols defines the future. By understanding how networks shape meaning, individuals can reclaim agency, contest domination, and construct more just and plural realities. In the networked age, meaning flows through channels shaped and programmed by those who frame it. Encoding power into every symbol and slogan can fracture frames, through grassroots storytelling or collective outrage. The very networks are transformed into battlegrounds for resistance to decide who ultimately defines shared realities.

5.2. Deception and manipulation

(Networks of influence: Deception in mass communication)

'Propaganda is to a democracy what the bludgeon is to a totalitarian state'.

— Noam Chomsky, Media Control

'The conscious and intelligent manipulation of the organised habits and opinions of the masses is an important element in democratic society'.

— Edward Bernays, Propaganda

'Communication of deception' is the paradigm that emerges after the fall of monarchies with the rise of democracies, where people are expected to speak through elected officials and public opinion. The language of freedom hides the machinery of influence—free speech becomes a battlefield of contradictions. Media no longer manufactures consent but dissent, fostering fragmentation, conflict, and the illusion of choice. It is the era of linguistic civil war—where every word claims freedom but serves power. If deception is always possible in language, then the current paradigm of mass communication—built on the transmission of information, persuasion, and influence—stands on fragile ground. Language, long trusted as a vehicle for clarity and reason, proves equally adept at concealing, distorting, and misleading. In politics, media, and public discourse, the ability to manipulate through speech has become a measure of success, transforming communication into a tool of control rather than understanding. This paradigm reduces language to strategy, where truth is secondary to effectiveness. But when deception becomes endemic, meaning dissolves, and trust collapses. If every utterance can hide a lie, the foundation of communication erodes. A new paradigm must emerge, not based on the mechanics of influence but on ethical commitments—responsibility, honesty, and trust. Such a shift moves communication from domination toward communion, from spectacle toward dialogue. The future of speech depends less on linguistic sophistication or technological scale and more on the moral quality of human presence. Without ethical anchoring, language ceases to be a shared world; it becomes a battlefield of illusions. Only by reimagining communication as a moral relation rather than a technical act can people hope to restore the possibility of genuine understanding. In historical terms, democratic discourse assumed that open debate and a free press would immunise public opinion against falsehood. In practice, however, the proliferation of print, broadcast, and online channels has lowered barriers to entry for actors who wield deception as a strategic weapon. Propaganda techniques once limited to state intelligence services are now available to corporate interests, political campaigns, and technological intermediaries. This convergence underscores the urgency of revisiting classical models—Lasswell's actor-message-channel-audience-effect schema and Shannon–Weaver's noise concept—to comprehend how intentional distortions propagate through increasingly complex media ecologies. Technological affordances compound these challenges. Algorithmic recommendation systems prioritise engagement, rewarding sensational or emotionally charged content over sober analysis. Deepfakes and AI-driven text generators produce high-fidelity simulacra of speech and image, erasing easy distinctions between fact and fabrication. Social platforms, designed to optimise virality, enable echo chambers that insulate audiences from corrective feedback. In such environments, strategic omissions, selective framing, and rhetorical amplification become more potent than outright lies, since they exploit cognitive biases and social bonds. Audience agency remains central. Individuals seek content that affirms identity, values, and emotions—uses-and-gratifications theory in action. Opinion leaders and micro-influencers further bridge the gap between mass channels and personal networks, lending

deceptive messages the trust of interpersonal endorsement. The result is a self-reinforcing loop: tailored deceptions reach receptive nodes, gain traction through social proof, and then feed back into larger broadcast systems as 'organic' trends, obscuring the origins of manipulation. Confronting this endemic deception requires more than fact-checking or regulatory mandates. Ethical recalibration must occur at every level: platform architects must design for transparency and verifiability; educational systems must cultivate reflexive media literacy; public institutions must model accountability and restorative practices. Dialogic forums, collective truth commissions, and deliberative assemblies offer blueprints for reestablishing shared factual ground and rebuilding communal trust. By anchoring communication in moral presence and mutual recognition, it becomes possible to transcend the current paradigm of strategic deceit. Language's capacity to connect, illuminate, and empower should be recovered.

Deception of communication

Deception offers a critical framework for understanding how falsehoods shape perceptions, beliefs, and behaviours in the digital media environment. As a concept, it bridges disinformation (intentional lies), misinformation (unintentional inaccuracies), and misperceptions (false beliefs), showing how intent, strategy, and reception interact. By moving beyond content analysis to examine how falsehoods are produced, circulated, and adopted, deception theory connects the relational structures of communication with broader systems of control. Defined as the intentional act of misleading to achieve specific goals, deception is not merely about content but about manipulation of context. It exploits the structure of media systems—algorithmic amplification, platform design, and institutional ownership—to distort reality. Whether through selective omission, repetition, or emotional framing, deceptive communication reshapes public discourse. Unlike isolated errors, it is systemic, relational, and strategic. It thrives where cognitive bias meets technological affordance, manipulating not only what is believed but how belief itself functions. Lasswell's five-point communication model—Who says what, in which channel, to whom, with what effect—remains directly relevant. Deception aligns each element: the actor (intentional deceiver), the message (crafted distortion), the channel (optimised for spread), the audience (primed by bias), and the effect (altered perception and behaviour). Lasswell's early analysis of propaganda already positioned communication as an instrument of elite manipulation, a perspective revived in today's studies of viral disinformation. Shannon and Weaver's model adds a technical layer: deception acts as noise, disrupting transmission and increasing entropy. Feedback loops—likes, shares, clicks—do not correct this distortion but often reinforce it, creating a recursive, self-validating system of misinformation. Agenda-setting theory, explains how deceptive actors flood discourse to shape attention and define reality. Priming and framing effects are intensified by hybrid media systems, where traditional and digital platforms merge to sustain narratives. Audiences, influenced by uses and gratifications theory, seek media that affirms identity, making them vulnerable to deception that satisfies emotional needs—belonging, fear, anger. Selective exposure further isolates them in echo chambers, increasing polarisation. Critical theorists anticipated the manipulation of consciousness by media industries. Their insights into commodification and ideological control find new relevance in digital deception. The two-step flow model adds another layer: influence spreads through opinion leaders who carry deceptive content into social networks, using trust to override fact. Modern deceivers—bots, influencers, and political actors—capitalise on these dynamics, creating relational proximity that substitutes for truth. Deception is more than a symptom; it is an operating logic in a communication system built for manipulation. By unifying classical theory with contemporary dynamics, it reveals how misinformation is not merely a breakdown of communication, but its strategic redesign.

Studying deception illuminates the shifting architecture of belief in an era where communication is both weapon and terrain. How might our understanding of deception change if we began to see every message not just as information, but as a potential strategic manoeuvre? What questions would we then ask about the ethics, accountability, and design of the very systems through which we communicate?

Faulty logic and fallacy of speech

The fallacy of speech arises when arguments appear persuasive on the surface but are underpinned by faulty reasoning, linguistic confusion, or intentional manipulation. A fallacy distorts the logical structure or content of an argument, making it unsound even if its premises seem valid. While such errors can emerge innocently from ignorance or cognitive bias, they are often employed strategically to persuade, deceive, or distract. Aristotle's early systematisation of fallacies in 'On Sophistical Refutations' defined them as flawed modes of argument that pretend to establish truth but fail under scrutiny. These patterns remain deeply embedded in both informal discussions and formal rhetorical exchanges, particularly in mass communication and public discourse. Fallacies are generally classified as either formal or informal. Formal fallacies concern the internal structure of an argument—errors in deductive logic that invalidate conclusions regardless of the truth of their premises. Informal fallacies, on the other hand, arise from the misuse of content, language, or context. These include ambiguities, irrelevant arguments, and flawed evidence. The distinction highlights how a speaker may argue in a logically valid form yet employ misleading content, or vice versa. More contemporary models, such as the pragma-dialectical approach, analyze fallacies as violations of fair dialogue. Here, the fallacy is not just a breach of logic but of cooperative communicative norms. This view emphasises the social function of argumentation and the importance of sincerity and reasonableness in disagreement. Common informal fallacies illustrate how persuasive language can easily mask faulty logic. The 'post hoc' fallacy falsely infers causation from mere succession in time. The 'slippery slope' suggests that a small step will lead to extreme outcomes without adequate evidence. The 'straw man' distorts an opponent's view to simplify refutation. The 'false analogy' equates dissimilar cases. The 'argument from silence' draws conclusions from a lack of evidence rather than its presence. More recent critiques include measurement fallacies, such as overinterpreting quantitative metrics—treating data as proxies for value without acknowledging their limitations. In academic contexts, this leads to overreliance on indicators like journal rankings or citation counts, despite their questionable epistemic significance. Intentional fallacies—such as red herrings, ad hominem attacks, or false dilemmas—are commonly employed in political and media rhetoric. They often succeed because they appeal to emotion, identity, or group affiliation, exploiting social biases more than logical clarity. Humor and irony can use fallacies playfully, but in domains of trust—like education, science, or governance—such tactics corrode credibility. The fallacy of speech thus represents not only a philosophical and logical problem but also a moral and political one. Understanding these flawed reasoning patterns enables people to resist manipulation, engage in more sincere dialogue, and defend the fragile structures of truth that underpin public discourse. How might a culture of dialogue in which participants not only recognise and call out fallacies, but also commit to the shared norms of sincerity, reasonableness, and intellectual humility?

Language of misinformation

The language of misinformation operates not through silence, but through noise—an overwhelming hum of half-truths, selective facts, and emotionally charged distortions. Unlike disinformation, which is crafted to deceive with intent, misinformation spreads as a byproduct

of error, belief, or bias. It may originate from honest misunderstanding or careless reporting, but its effects are rarely benign. It circulates through speech, text, and image, absorbing the authority of language while undermining its capacity to convey truth. In political campaigns, medical debates, and digital culture, the subtle rhetoric of misinformation reshapes perceptions without necessarily lying outright. It manipulates emphasis, omits context, and reorders fragments of reality to create plausible illusions. Language, here, is not used to clarify or 'to commune with' but to confuse, assert, or persuade. Misinformation has always depended on language's weaknesses: its ambiguity, flexibility, and reliance on interpretation. Ancient examples like the Great Moon Hoax of 1835 reveal that falsehood thrives not only through invention but through style—how language dramatises, mythologises, and cloaks speculation in the appearance of fact. Modern misinformation accelerates this process. With each new medium—print, broadcast, internet—misinformation acquires new dialects: the language of the viral tweet, the infographic, the clickbait headline, the captioned image. These modes strip language of nuance while heightening its emotional and persuasive power. Speech becomes an instrument of distortion when speakers exploit the trust embedded in shared language. The familiar idioms of authority—scientific terms, political slogans, statistical references—are adopted to imply credibility. Falsehood then parades in borrowed form. The mechanisms of communication amplify rather than restrain this dynamic. Algorithms favour viral phrasing, repetition, and confirmation of tribal identity. Emotionally resonant phrasing—anger, fear, certainty—outpaces cautious qualification or ambiguity. In such an environment, misinformation is not merely tolerated; it is rewarded. Attempts to counter misinformation often rely on the same medium that spreads it—language. Fact-checking, clarification, and media literacy are efforts to restore semantic stability. Yet correction struggles against momentum. Language, once shaped into narrative, resists revision. A false phrase embedded in memory becomes a permanent trace, however inaccurate. Speech creates belief not only by asserting but by repeating. Corrections, even when accurate, often lack the stylistic power of the initial misinformation. The rhythm of speech matters more than the logic of rebuttal. Artificial intelligence introduces new forms of synthetic speech, capable of mimicking human tone and producing endless plausible falsehoods. Deepfakes and text generators can mass-produce misinformation in the idiom of truth. Yet AI also provides tools for detection—scrutinising patterns, tracing origins, and filtering content. The paradox is that the same system that degrades speech may help rescue it. Misinformation exploits the communicative function of language while betraying its ethical one. It converts language from a space of dialogue into a mechanism of influence. The challenge is not merely to correct false statements but to reform how speech is trusted, circulated, and anchored to reality. In this context, the ethics of language—precision, transparency, humility—become tools of resistance. Language, long abused as a weapon of confusion, must again serve its older role: communion, not command. Which ethical commitments and practical interventions—grounded in precision, transparency, and humility—could restore language's role as communion rather than command?

Strategies of disinformation

Disinformation is the deliberate use of false or distorted information to deceive, confuse, or manipulate public perception in the service of political, military, or commercial interests. It does not merely involve spreading lies, but often incorporates fragments of truth, manipulated context, or rhetorical exaggeration. Unlike misinformation, which arises through error, disinformation is intentional, calculated, and often part of coordinated campaigns designed to destabilise trust, inflame identity conflicts, or demobilise civic participation. As a linguistic strategy, disinformation weaponises communication by transforming language from a medium

of understanding into a tool of control and confusion. The modern understanding of disinformation draws from Cold War-era intelligence operations. The Russian term 'dezinformatsiya'—popularised by Soviet intelligence services—described strategic media efforts to mislead foreign populations. This history shaped the concept's current use in digital information warfare. Today, disinformation operates through digital channels: falsehoods seeded by bots, algorithmic amplification of divisive narratives, and fabricated content designed to appear legitimate. The core strategy involves seeding false or partial information and relying on social networks to echo it through emotionally aligned audiences who accept it as authentic and personally meaningful. Studies classify disinformation alongside misinformation and malinformation. Disinformation specifically refers to harmful falsehoods spread with intent. Analysts describe an 'ABC' framework for understanding disinformation campaigns: Actors (state or non-state), Behaviours (covert dissemination, identity concealment), and Content (fabricated stories, manipulated images). Scholars also identify seeding and echoing as the two dominant dynamics: initial dissemination through strategic planting, followed by audience amplification as beliefs, opinions, or ideological affirmations. Social media ecosystems, with their feedback loops and algorithmic visibility, make such echoing not only possible but inevitable. Disinformation differs from propaganda in scope and intent. While propaganda seeks to promote an ideology or mobilise belief, disinformation often aims to erode belief altogether. Its goal is not necessarily persuasion, but destabilisation—of truth, authority, and mutual understanding. It breeds cynicism, distrust, and disengagement by overwhelming people with conflicting messages, false equivalencies, and polarising narratives. This strategy fragments consensus and paralyses action, particularly in democratic societies dependent on informed public discourse. Various governments and corporate actors have used disinformation for their own purposes. From 'active measures' to contemporary online manipulation campaigns, disinformation has shifted from analogue tactics like forged documents and whisper campaigns to digital tools like deepfakes and algorithmic misinformation. These strategies often target cultural and political fault lines—such as race, immigration, or health—to create chaos and doubt. Research increasingly suggests that even small-scale operations, when timed precisely and amplified effectively, can distort electoral outcomes, damage public health responses, or deepen social polarisation. Addressing disinformation cannot rely solely on fact-checking or platform moderation. Its persistence reveals deeper political and cultural vulnerabilities. The language of disinformation thrives where trust is weak, authority is contested, and meaning is fragile. Combating it requires more than detecting lies—it demands exposing the economic and strategic incentives behind deceptive media practices. Disinformation is not just an informational error—it is a weaponised language strategy that exploits the structures of communication itself. What measures could illuminate and disrupt disinformation campaigns' actors, behaviours, and echoing dynamics? What will happen if we start exposing strategic incentives, breaking amplification loops, and rebuilding trust in public discourse?

Systematically distorted communication

Jürgen Habermas's theory of systematically distorted communication[145] addresses the structural and psychological obstacles that prevent genuine understanding in human interaction. Rooted in his broader project of communicative rationality, Habermas argues that undistorted communication—where speakers engage freely, equally, and openly—is rarely achieved in

[145] Habermas, J. (1970). On systematically distorted communication. Inquiry, 13(1–4), 205–218. https://doi.org/10.1080/00201747008601590

practice. Instead, much of everyday speech is marked by hidden constraints, unconscious influences, and ideological structures that produce pseudocommunication: the illusion of consensus masking deep misunderstanding. These distortions are not just mistakes or intentional lies but are embedded in how people think, speak, and relate, making them both pervasive and invisible. Drawing from psychoanalysis, especially Freud, Habermas contends that early emotional conflicts shape linguistic and symbolic capacities, giving rise to internalised distortions that persist into adulthood. These appear in language as what Freud called 'paleosymbols'—pre-linguistic, emotionally charged symbols that escape conventional grammar. They disrupt clarity by injecting ambiguity, rigidity, or personal meaning into public language. At the social level, ideology functions similarly, shaping entire discourses to serve dominant power structures, thereby naturalising inequality, and suppressing critique. Habermas identifies three levels where these distortions operate. At the linguistic level, speech violates shared rules, making comprehension difficult. At the behavioural level, communication becomes compulsive or stereotyped, revealing unconscious emotional residues. At the systemic level, a disjunction arises between speech, gesture, and intention—what is said does not match what is meant or felt. These phenomena are not isolated errors but signs of a deeper pathology, rooted in unresolved developmental or societal tensions. To address these distortions, Habermas turns to psychoanalysis as a model of semantic reconstruction. Therapy provides a dialogic setting where repressed content can be brought into language through reflection and narrative. In the transference relationship, the patient unknowingly reenacts past conflicts with the analyst, who helps decode and re-symbolise these paleosymbols into publicly comprehensible speech. This process restores the communicative function of language and reestablishes the possibility of understanding—at the individual level through personal healing, and potentially at the societal level through critical discourse. Systematically distorted communication is more than a clinical or psychological problem; it is also a political and institutional one. Habermas links distorted communication to structural inequalities—ideologies that dominate language, media, and public discourse. Examples include Nazi propaganda, which systematically reshaped German language to support mass violence, or sexist language, which reflects and reinforces gender hierarchies through grammatical norms and cultural metaphors. In these cases, distortion is not individual pathology but collective normalisation of asymmetry and exclusion. For Habermas, critique is essential to overcoming such distortions. Unlike manipulation, which is deliberate, systematic distortion relies on self-deception—people believe they are communicating transparently while unknowingly reproducing hidden interests or traumas. Critique, when rooted in rational dialogue and minimal truth claims, can expose these unconscious forces. Yet critique alone is insufficient. Emancipation demands institutional change, public deliberation, and ethical commitment. It requires not only rational analysis but emotional and moral engagement with the consequences of distortion. In the modern public sphere, phenomena like filter bubbles, echo chambers, and algorithmic manipulation represent contemporary forms of systematically distorted communication. These digital structures foster fragmentation, reinforce ideological insulation, and hinder shared understanding. Yet they also highlight the enduring relevance of Habermas's theory: the crisis of communication reflects not the end of dialogue but the need to renew its foundational conditions. Social media, while amplifying distortion, can also host 'counterpublics' and emancipatory resymbolisation, depending on how speech norms and platforms are structured. Habermas insists that normal communication depends on shared linguistic rules, reflexivity, and a commitment to mutual understanding. When these conditions break down—through repressed conflicts, ideological coercion, or systemic inequality—language loses its democratic potential. The task of psychoanalysis, critical theory, and political action is to restore that potential by reconnecting

language with truth, experience, and ethical responsibility. Ultimately, systematically distorted communication is a symptom of deeper human and societal divisions. It obscures understanding by inserting unconscious or ideological content into public language. Overcoming it requires a blend of semantic analysis, self-reflection, and collective critique. Habermas's model remains one of the most ambitious attempts to unify psychoanalysis, linguistics, and social theory into a project of human emancipation through language. Which practices or institutional changes could implement semantic reconstruction and critical dialogue to effectively resist systemic distortions in public discourse?

Transmission or association?

The dominant conception of communication often reduces it to a matter of transmission—an efficient and measurable transport of information. This view, rooted in engineering and information theory, treats communication as a process of sending messages from a sender to a receiver through a medium. The success of communication, in this paradigm, is evaluated by how much and how accurately information is transferred. Communication becomes a mechanism—quantifiable, scalable, and technologically adaptable. It serves the interests of mass media, governments, and global corporations who seek to maximise reach, repetition, and clarity. In this model, the message and its medium dominate: language is instrumentalised, and meaning is determined by the quantity and spread of data. In contrast, another tradition views communication not as transmission but as communion. This paradigm emphasises association, connection, and shared presence. Rather than focusing on the message, it centres on the human act of coming together—of joining in meaning and experience. Here, language is not the final product but only a tool, sometimes even a distraction. The essence of communication lies not in information exchange but in mutual presence and trust. It is not measured by scale or speed but by the quality of attention and honesty among participants. This view aligns with the original etymology of communication from the Latin 'communicatio', meaning to make common, to share, or to participate in something together. This divergence creates two competing visions of human interaction. The first, the transmission paradigm, assumes that humans are essentially language-using animals whose primary goal is to disseminate ideas, instructions, or data. The second assumes that humans are relational beings who use language as one of many ways to experience and affirm mutual presence. The first view is aligned with the spread of civilisation and the consolidation of large-scale societies. It assumes the necessity of standardised languages, mass literacy, and information management systems. The second remains closer to tribal, familial, or conspiratorial contexts—where language functions as a breath shared, not a signal broadcast. The Latin root 'conspirare'—to breathe together—captures the second paradigm well. Communication as conspiracy implies an intimate social logic: people come together not merely to exchange thoughts, but to become something together. In this context, meaning is not transmitted; it is co-created. Speech becomes an act of trust, not a delivery. Words do not merely name things but allow participants to form a common life. Each model of communication has its own logic of failure. In the transmission model, failure is technical—noise, interference, misinterpretation. Solutions are technological and structural: more bandwidth, clearer signals, universal grammar. In the communion model, failure is emotional or ethical—dishonesty, alienation, or indifference. Solutions here are relational: presence, listening, confession, or silence. The dominance of the transmission paradigm shapes not only communication technologies but also academic disciplines. Communication studies, as it evolved in the twentieth century, often privileged models such as Shannon and Weaver's, emphasising linear flows and feedback loops. Even interaction and transaction models rarely escape the underlying metaphor of exchange. Sociology and political science adopted these

models to describe mass opinion, propaganda, and media influence. The result is a prevailing assumption that language's main function is control—whether over others, environments, or systems. But communication also involves association, the slow and uncertain work of building understanding, kinship, and shared life. This associative paradigm is harder to study, harder to quantify, and less profitable—but no less real. It sees communication not as the key to mastering the world but as the ground of becoming human. Civilisations rise by building systems of transmission. But when these systems collapse—through war, ecological crisis, or social fragmentation—what remains are small associations of meaning, trust, and speech. Tribal associations form again, not around the best-spoken message, but around the most trustworthy speaker. Words become sparse, but presence becomes vital. Understanding returns, not through loudness or scale, but through silence, intimacy, and the breath of speech between people. This contrast between communication as control and communication as communion also highlights the risk of abstraction. If language is treated as a divine tool or universal force—defining humanity itself—then speech becomes sacred and must be universally transmitted. In this light, mass literacy, public speaking, and social media are seen as civilising acts. But if speech is merely one possible way of being-with-others, then silence, ritual, gesture, or shared labour can be equally communicative. Ultimately, the two paradigms do not exclude each other, but they compete for dominance. In periods of expansion and consolidation, transmission triumphs—empire, ideology, and media flourish. In times of collapse and renewal, association returns—speech becomes again a quiet breath, a conspiracy of presence. To understand communication in its full depth, both models must be considered, not as stages of development, but as coexisting ways of being human. The paradigm of transmission is based on mass indoctrination, manufacturing of content and consumption of news. The new paradigm of communication as association must be built on ethical principles. What combination of reforms, designs, and community practices could ensure an associative communication grounded in shared presence, trust, and co-creation of meaning is actively integrated into societies and platforms? How might such integration be measured, sustained, and protected against instrumentalisation?

5.3. Paradigm change

(Ethical turn in communication: Language as mirror, not weapon)

'A change of paradigm is not only a change in theory—it is a change in what counts as truth'.

— Thomas Kuhn, The Structure of Scientific Revolutions

'A theory of communication must now account for decentralisation, participation, interactivity, and fragmentation—not just influence and control'.

— Denis McQuail, Mass Communication Theory

'Communication of ethics' is the new paradigm that must break with both control and manipulation, calling for a language grounded in honesty, humility, and mutual presence. Communication is no longer a strategic act but an ethical encounter—fragile, open, and unarmed. This transformation is not driven by innovative technologies, but by the historical need for peace after centuries of linguistic warfare. What remains is either a language of peace—or a dignified silence. A paradigm change in language and communication theory is not merely an academic correction—it is a rupture in how reality, meaning, and power are organised. As earlier sections on deception and manipulation have shown, when language becomes a tool for control rather than understanding, the very medium of shared meaning

collapses into a field of strategies, disguises, and distortions. In this degraded state, the prevailing model of mass communication—premised on influence, persuasion, and manipulation—becomes obsolete. If deception is always structurally possible within language, then the current paradigm that relies on trust in rational discourse, universal comprehension, and consensus is futile. A new paradigm must emerge, not as a technical upgrade but as an ethical transformation. This shift calls for language to move beyond its traditional function as a representational system—a mirror of fixed truths—and toward a self-aware instrument of reflection, rooted in honesty, responsibility, and transparency. Thinkers like Deleuze have already challenged the metaphysical assumptions of representation itself, exposing how categories like identity, truth, and meaning are not stable foundations but mobile, contingent processes. Similarly, the rise of hybrid media systems has revealed the fragmentation, interactivity, and vulnerability of digital communication, showing that mass communication no longer functions within coherent, centralised structures. Thus, paradigm change requires not just theoretical innovation but a new linguistic ethos: language must relinquish its obsession with persuasion, control, and eloquence, and instead accept its role as an uncertain but sincere medium of engagement. The transformation is not technological but existential. It is a call to remake the very principles by which humans speak, write, and relate to one another—not for influence, but for clarity; not for power, but for trust. The historical function of language as a means of human understanding has been eclipsed by its instrumentalisation as a vehicle of persuasion, manipulation, and ideological control. In communication theory, this shift reflects a deeper epistemic crisis—where language ceases to reveal and begins to obscure. Denis McQuail, in his 'Reflections on Paradigm Change in Communication Theory and Research', recognised the instability of dominant models that privilege control, linearity, and transmission over complexity, ethics, and meaning. He called for a rethinking of foundational assumptions—an opening toward alternative paradigms that can better account for the symbolic, relational, and power-laden nature of communication. The need for such a transformation is echoed across critical traditions that uncover how communicative acts reproduce ideological structures. Herman and Chomsky's 'Propaganda Model' reveals how the language of mass media, under the guise of neutrality, manufactures consent through selective framing and silence. UNESCO's 'New World Information and Communication Order' and the McBride Report once gestured toward a more pluralistic and just communicative order—but these visions were left unrealised. Today, as speech itself is commodified and strategic performance replaces genuine dialogue, a new paradigm must emerge. One rooted not in influence or control, but in ethical responsibility, epistemic humility, and communicative authenticity. A new linguistic ethos is required—one that relinquishes persuasion as an end and restores language to its original function as a medium of human understanding. Words must become gifts, not weapons; invitations, not impositions. Ethical communication demands novel methods: meta-languages that expose hidden assumptions, digital protocols that prioritise transparency over engagement metrics, and educational practices that cultivate epistemic humility and active listening. Only through such interdisciplinary innovation can language serve its highest calling: not to conquer minds, but to foster solidarity, illuminate difference, and honour the fragile work of mutual becoming.

Paradigm change in communication theory

Denis McQuail's analysis of communication theory addresses a profound transformation in how media and communication are conceptualised, researched, and practiced. A 'paradigm change', in this context, refers to a fundamental shift in the foundational assumptions and frameworks that structure an academic field. In communication studies—an evolving and still-young discipline—this shift has been especially influenced by technological innovations and

media practices, often outpacing the pace of theoretical reflection. McQuail traces how the initial mass communication paradigm has slowly eroded, giving way to a more pluralistic and interactive understanding of communication. Rather than a single linear transformation, he identifies several overlapping changes across three key areas: media effects, audience reception, and the nature of communicative relationships. The early paradigm, dominant in the mid-20th century, conceived of communication as a one-way process of message transmission from centralised sources (e.g., newspapers, radio, film) to a passive mass audience. This model emphasised control, influence, and predictability, supported by research on propaganda, advertising, and persuasion. It reflected a belief in the power of media to shape opinions and behaviours uniformly across large populations. However, over time, this framework faced growing criticism. Empirical findings increasingly demonstrated that audience interpretation was shaped by social context, prior knowledge, and selective exposure. The mass audience turned out to be more fragmented, resistant, and self-directed than initially assumed. Parallel to these empirical challenges, communication theory began to incorporate more interactive models. Scholars shifted their focus from how messages are transmitted to how they are received, interpreted, and negotiated. New frameworks, such as agenda-setting, framing, and cultivation theory, maintained an interest in media effects but acknowledged more complex, long-term, and contextually mediated influences. This theoretical evolution signalled the beginning of a new paradigm, one that no longer presumed a singular message flowing unchanged from sender to receiver. Audience research further accelerated this transition. The passive receiver gave way to an active user—an interpreter, participant, and co-creator of meaning. Uses and gratifications theory explored why audiences seek media, while reception theory, especially through cultural studies, demonstrated how individuals and groups assign diverse meanings to the same content. This marked a break from the mass audience concept and toward an understanding of segmented, interpretive, and networked publics. Technological change also played a pivotal role. The shift from one-to-many broadcast media to interactive, peer-to-peer, and algorithmically driven networks disrupted conventional models of communication. New media forms—social platforms, messaging apps, streaming services—blurred the line between producers and consumers. McQuail is identifying various modes of information exchange beyond transmission, including consultation and conversation. These newer models reflect today's reality, where roles are fluid, feedback is immediate, and content is adaptive. Communication is reconceived not as simple message transfer but as a reciprocal process of meaning construction, constantly shaped by context, audience interpretation, and social interaction. Despite these changes, McQuail argues that a coherent new paradigm has yet to solidify. Instead, communication theory appears to be moving toward a family of related models that capture various dimensions of a decentralised, interactive, and participatory communication environment. While mass media institutions still exist and exert influence, their power is now embedded within broader, more fluid communicative ecosystems. In conclusion, McQuail's reflections suggest that communication theory has evolved from a mechanistic transmission model to a more nuanced and inclusive understanding of meaning-making. Paradigm change in this field is less a sudden rupture than a cumulative transformation across several fronts—audiences, technologies, and theoretical assumptions. Future research must embrace complexity and plurality to address how communication operates in an age of networks, platforms, and global interdependence. Though the old transmission model remains entrenched in commercial and political practice, McQuail calls for a redefinition of the field's priorities—to better reflect communication's cultural resonance and ethical stakes. We witness a cumulative shift from a unidirectional, transmission-focused model to a decentralised, participatory ecosystem within an ever-evolving network of producers and consumers. How

might practitioners adapt strategic, ethical, and pedagogical approaches to foster genuine engagement, co-creative meaning-making, and cultural resonance?

McQuail's Mass Communication Theory

Denis McQuail's contributions to media and communication theory[146] present a comprehensive framework for understanding the complex relationships between media systems, societies, and individuals. His work identifies key themes that consistently emerge in the analysis of mass communication and illuminates how these themes interact with broader technological, cultural, and political developments. McQuail emphasised that communication is not a neutral or static process but one deeply embedded in questions of time, place, power, meaning, identity, and governance. Time is central to communication, affecting how long it takes for a message to be delivered, stored, or retrieved. Modern media has transformed this temporality, compressing communication into near-instantaneous exchanges while simultaneously archiving it for future reference. But this also raises concerns—especially in digital environments—around data control, surveillance, and memory. Similarly, place once anchored communication in specific cultural or geographical contexts. With the rise of digital networks, communication now creates 'placeless places', where globalised, virtual communities challenge the boundaries of traditional social spaces. Power is a recurring concern in McQuail's theory. Media functions as a tool of influence, shaping public opinion, reinforcing authority, or, alternatively, exposing and resisting dominant narratives. This power is unevenly distributed and often reinforces structural inequalities along lines of class, race, gender, and nationality. In this context, media not only reports on social reality but also helps construct it. Representations of events, people, and institutions in media carry enormous weight in shaping public consciousness—raising critical questions about accuracy, objectivity, and manipulation. McQuail's model recognises that meaning is never fixed. It varies depending on whether the sender, the receiver, or a third-party observer interprets it. The ambiguity of meaning gives rise to misunderstandings, conflicting interpretations, and ideological struggles. This has led to an important theoretical tension in communication studies: whether media merely reflect social reality or actively create and distort it. While early theories leaned on a correspondence model—expecting media to mirror reality—more recent critiques suggest this is an outdated assumption. Media constructs, frames, and reinterprets the world, often privileging certain voices and perspectives while marginalising others. This leads to the question of bias. Media bias is not simply the result of ideological manipulation; it is often embedded in the institutional routines, professional norms, and economic constraints of media production. Studies show that certain topics—like violent crime or political scandal—receive disproportionate attention, while deeper, systemic issues go underreported. Audiences, too, contribute to this distortion by gravitating toward spectacle, emotional narratives, and entertainment. Moreover, people often interpret media content through the lens of their own beliefs and identities, reinforcing confirmation biases. Structuralist and semiotic approaches have become vital tools for unpacking these layers of meaning. They explore how signs, symbols, and images construct cultural narratives within media texts. Denotation and connotation interact to create powerful associations, especially in visual communication. Iconic photographs and televised imagery play a central role in shaping public perception, often surpassing the impact of verbal reporting. McQuail also highlights identity as both a product and a function of media. Mass media

[146] Mcquail, D. (2012). McQuail's mass communication theory. Los Angeles Calif. ; London: Sage.

contributes to the formation of individual and collective identities, influencing how people see themselves in relation to social groups, institutions, and global cultures. Cultural differences, far from being erased by global media, continue to shape the reception and interpretation of content. This underscores the need for media studies to remain sensitive to diversity and avoid universalising assumptions. Governance, finally, serves as the backdrop to all media activity. Laws, regulations, market dynamics, and ethical norms define what media can do, how it operates, and whom it serves. The need for responsible oversight becomes more urgent as media technologies evolve, especially in periods of rapid transformation. Regulation must balance freedom of expression with accountability, public interest with private control, and innovation with ethical responsibility. In sum, McQuail's theory provides a multi-dimensional lens for understanding media as a dynamic force in society. It emphasises not only the effects of media but the processes through which meaning is made, power is exercised, and culture is shaped. His work remains foundational in mapping the terrain of communication studies in an increasingly global and digital age. The goal is to rethink and reshape the ethical, inclusive, and culturally attuned production, distribution, and interpretation of media in our digitally interconnected world? How can emerging lenses—like networked publics, algorithmic mediation, and participatory culture—be mobilised to do that?

Exploration of language regulation

Denis McQuail's work on media regulation illuminates the delicate balance between protecting freedom of expression and ensuring responsible public communication. In his view, language regulation within mass media is essential not as a tool of censorship, but as a mechanism to guide communication systems through moments of disruption, technological transition, or social instability. The regulation of structure, conduct, and content aims to align media operations with public interest, cultural diversity, and ethical standards. For McQuail, this regulation must be both temporary and adaptive—serving to stabilise communicational-linguistic systems without becoming a permanent mode of control. Media regulation takes various forms, enacted by governments, institutions, or self-regulatory bodies. Historically, its roots can be traced back to the rise of the printing press when language control was first institutionalised to manage dissent and consolidate power. Over time, regulatory frameworks expanded across print, broadcasting, film, and now digital media. Language, as the medium of meaning and persuasion, lies at the heart of these efforts. Regulation today addresses both overt content—such as political speech or misinformation—and the underlying structures that shape media ownership, access, and diversity. The aims of language regulation are manifold. First, it protects the public from harm by preventing hate speech, incitement, and deception. Second, it supports cultural preservation, safeguarding minority languages and national identities in an era of global homogenisation. Third, it ensures fairness and pluralism in public discourse, resisting monopolistic control over narratives. Lastly, it promotes accountability by requiring transparency, ethical standards, and editorial responsibility. All these goals seek to mediate the inherent tension between linguistic freedom and social cohesion. Different models of regulation reflect divergent political and cultural priorities. The authoritarian model imposes strict control to maintain ideological conformity. The liberal model trusts market dynamics and individual freedoms, limiting state intervention. The social responsibility model strikes a middle path, emphasising the ethical obligations of media while defending expression. The development model uses language regulation to support national goals, while the alternative media model champions community-based, participatory voices. McQuail treats these models not as rigid categories, but as lenses to understand how language policy reflects deeper ideological choices about communication and power. Technological convergence complicates these traditional

frameworks. The rise of digital platforms, AI-generated content, and global media networks creates regulatory challenges that transcend national borders. Online communication erodes older distinctions between private and public speech, while algorithmic curation shifts editorial power from journalists to code. In this environment, regulation must evolve to remain relevant—addressing new forms of linguistic manipulation, reinforcing trust, and avoiding overreach. McQuail stresses that regulation should act as a temporary corrector, not a permanent restriction. Once a system regains balance, self-regulation and participatory norms should take precedence. Ultimately, McQuail advocates for a new communication paradigm—one that integrates insights from sociology, cultural theory, political science, and ethics. Traditional transmission models, focused narrowly on message delivery, fail to capture the complexities of meaning, context, and audience agency. A more holistic framework must consider how language in media not only reflects society but shapes it. This call for paradigm change extends to linguistics, which must also move beyond static models and engage with the ethical, political, and technological forces that influence language in contemporary society. In McQuail's vision, regulation is not merely a legal or institutional practice but a linguistic and ethical responsibility. It enables communication systems to serve society and human dignity—ensuring that media language remains a bridge for understanding rather than a tool for domination. The imperative for temporary, adaptive language regulation that safeguards cultural diversity, social cohesion, and human dignity eschews permanent control. What interdisciplinary governance models and participatory mechanisms can most effectively balance freedom of expression with ethical accountability across increasingly transnational and algorithmically mediated media environments?

New paradigm of communication

The new communication theory must integrate ethical, cultural, and political dimensions. In this new linguistic framework, communication becomes not only a technical function but a social practice deeply rooted in the human struggle for understanding, recognition, and agency. For much of modern intellectual history, language has been treated as an instrument of authority—shaping public opinion, constructing ideological systems, and maintaining the dominance of ruling groups. The Marxist observation that 'the ruling ideas are the ideas of the ruling classes' captures how language functions not merely as a means of description but as a mechanism of political reproduction. In this model, language is never neutral; it circulates in service of control or resistance, reinforcing the binary logic of domination and counter-domination. However, this cycle of linguistic conquest has exhausted language's capacity to create shared meaning. This paradigm would reject the premise that communication is a battlefield of the ruling ideas. Instead, it would redefine language as a medium of humility, trust, and ethical encounter. Rather than being used to impose, defend, or destabilise power, language would be deployed to open spaces for listening, hospitality, and mutual recognition. In this reimagined framework, the purpose of language is not to conquer minds but to build fragile, temporary, but meaningful bridges between people. Understanding replaces persuasion. Recognition supplants ideological triumph. The aim is no longer to rule others' thoughts but to meet them where they are. This perspective demands a new ethical vocabulary—one based not in influence but in shared vulnerability. Historically, both linguistics and communication studies were shaped by mechanistic, instrumental frameworks. The early 20th-century models of communication, built on the logic of transmission, mirrored structuralist linguistics with its emphasis on syntax, grammar, and formal systems. In both fields, meaning was treated as a fixed object passed from sender to receiver, measurable and controllable. The audience was passive, the structure rigid, and the goal efficiency. In this model, language was stripped of its

dialogic, ethical, and social dimensions. The reduction of language to system and communication to transmission removed the possibility for ambiguity, ambiguity that is central to understanding, trust, and humanity. To undo this legacy, a new model must view language not as structure but as relation. Communication becomes a practice of ethics, not just technique. In this view, there are no 'ruling ideas', because the goal is not to rule—but to understand. Words no longer dominate; they invite. Language no longer classifies; it listens. The political implications are significant. A society structured around such a view of communication would de-centre power in discourse, replacing hierarchies of speaking with circles of hearing. Such a shift could begin to resolve the crisis of public trust, the breakdown of shared meaning, and the escalating linguistic violence of digital life. If language creates reality—as the Sapir-Whorf hypothesis suggests—then reshaping how language is used reconfigures the reality people live in. Advertising, political rhetoric, and consumer culture rely on manipulating language to create dissatisfaction, dependency, and desire. Words become obstacles, redirecting attention, inflating needs, and distorting perceptions of fulfilment. In contrast, the new paradigm would reconstitute language as a space for alignment between word and world. Reclaiming language requires exposing the scaffolding of linguistic manipulation and reasserting the possibility of ethical speech. Not by adding more noise, but by simplifying the signal. The transformation begins in how people speak to each other: whether language is used to impose certainties or to explore uncertainties. Communication becomes not an arena for domination, but a shared effort toward clarity and care. This vision is not utopian but necessary. If language continues to serve only power, then it will cease to serve meaning. A society built on ruling ideas will collapse under the weight of its own slogans. Only by stepping outside the loop of language-as-power can people restore its function as a tool of mutual becoming. No longer a weapon, language becomes a gift—offered without demand, received without suspicion, and held in common. Such a paradigm shift is not merely academic; it is existential. It asks whether people are prepared to abandon control in favour of connection, to leave behind ruling ideas in search of shared understanding. Language is a gift of mutual becoming rather than a tool of domination. What cultural, educational, and policy shifts would be required to cultivate an ethos of listening, humility, and ethical encounter in everyday communication?

New paradigm of linguistics

Denis McQuail's reflections on paradigm change in communication theory provide a foundation for rethinking the role of linguistics in the evolution of mass communication. A genuine transformation in communication studies cannot occur without a fundamental reorientation of linguistic theory. Language is not a passive vessel for messages but the condition of possibility for meaning itself. Communication cannot be reimagined without first revising how language is understood—not as a fixed structure but as a dynamic, socially embedded process. Traditional communication theory, grounded in the early 20th-century model of mass media, treated language as a neutral transmission channel. In parallel, early linguistic theory focused on formal grammar, viewing language as a closed system defined by syntactic rules and internal consistency. These mechanistic views aligned with the linear model of communication, where information flowed unidirectionally from sender to receiver, and meaning was assumed to be fixed and recoverable. Such models neglected the interpretive, contested, and contextual nature of language. They overlooked how power and ideology operate through speech, how identity is inscribed in linguistic practice, and how meaning is constantly negotiated in social contexts. The emergence of pragmatics, sociolinguistics, and discourse analysis marked a shift toward understanding language as performative, situated, and socially constructed. These developments reflect a move away from abstract competence toward

concrete performance—what people say and do with language in real-world contexts. Digital and multimodal media further expose the limitations of conventional linguistic models. Online communication merges text, image, audio, and gesture into hybrid forms that resist analysis through structural linguistics alone. Social media discourse, driven by speed, irony, brevity, and virality, blurs traditional distinctions between speaker and audience, grammar and improvisation, official and vernacular registers. Language, in these settings, becomes an evolving negotiation, not a stable code. A new paradigm of linguistics must therefore embrace instability, plurality, and the co-production of meaning. It must address language not as an object but as an event—emerging between people, shaped by context, mediated by culture, and always ethically implicated. This shift carries major consequences for how mass communication is understood. If language is fluid, then communication outcomes cannot be easily predicted or controlled. Media messages no longer guarantee fixed effects but invite interpretation, resistance, and transformation. The audience is not a passive recipient but a linguistic actor who redefines the message in the act of reception. Recognising this repositions communication not as an imposition of meaning but as a collaboration—however fragile or conflicted—between language users. A renewed linguistic paradigm must confront the political implications of language. It must explore how linguistic norms are constructed, who enforces them, and who is excluded. The problem in linguistics of using language to understand language reveals a profound philosophical paradox. Language is both the tool and the object of analysis, making it fundamentally self-referential. This recursion traps thought within the very structures it seeks to understand. Saying 'the word ‘word’ is a word' immediately illustrates this loop, where each attempt to define or escape language relies on language itself. This circularity renders any purely linguistic critique of language inherently limited. It is as if language is a mirror facing another mirror, producing infinite reflections but no exit. To confront this paradox, a new language about language is needed—one that does not merely extend existing terms but shifts the way humans conceptualise linguistic meaning. Language does more than describe the world—it constructs it. It sets the boundaries of what can be thought, named, and shared. The limits of language are not simply grammatical or lexical but cognitive and perceptual. Language shapes not just communication but also consciousness. When problems arise from within this framework, any attempted solution using the same linguistic tools is inevitably inadequate. Which interdisciplinary, ethical, and digital approaches can break linguistics’ self-referential loop and enable responsible, collaborative meaning-making in modern media?

Toward a linguistic mirror

The new language about language must operate as a 'meta-language'—a framework that enables reflection on the structures, assumptions, and blind spots embedded in ordinary speech. Rather than adding novel words or grammar, it must challenge the architecture of expression. Five core principles could guide such a language. First, 'non-linear thinking': traditional language relies heavily on linear order—subject, verb, object—which enforces sequential logic. A new language might borrow from spatial, visual, or symbolic systems to represent networks of meaning rather than linear progressions. Second, 'embracing ambiguity and multiplicity': standard language tends to exclude ambiguity in favour of clarity and control. Yet ambiguity reflects the complexity of reality. A new language would allow for layered meanings and unresolved tensions without collapsing them into simplicity. Third, 'meta-awareness': this language would contain explicit cues about context, intent, and uncertainty, allowing users to reflect on their expressions and their implications as they speak. Fourth, 'integration of emotion and intuition': while current language systems often marginalise affect and instinct, a fuller

language would welcome these as valid and essential forms of knowledge. Fifth, 'dynamic evolution': this language must remain open-ended, designed for continual revision rather than institutional stability. The new language about language must abandon its entanglement in emotion, persuasion, and the desire for admiration. Rather than functioning as a tool for power, beauty, or seduction, this language would serve as an unfiltered mirror of reality—devoid of vanity, bias, or self-interest. It would not aim to entertain or convince but to reveal. This linguistic mirror would neither amplify nor diminish, neither distort nor idealise. Its function would be to present the world as it is: complex, contradictory, and often indifferent to human desires. Such a language would no longer aspire to sound eloquent, logical, or even intelligent. It would tolerate clumsiness, embrace ambiguity, and resist the urge to simplify reality for the sake of understanding. Beauty would be irrelevant. Logic would be viewed as one possible structure among many, not a divine or final order. The emphasis would shift from expression to reflection—from shaping meaning to observing it as it emerges. In its clearest form, this language would no longer serve ambition, ideology, or even culture. It would exist as a neutral instrument, stripping away centuries of rhetorical accumulation and poetic embellishment. To arrive at this mirror-like state, language must be cleansed of its historical burden—the weight of being used to manipulate, persuade, and dominate. The cultural and emotional sediment embedded in words must be shaken loose. Even concepts like truth and clarity must be re-examined, not as universal goals but as situational reflections of a speaker's context. This new linguistic paradigm would reject the self-love common to many traditional languages—the pride in structure, complexity, or eloquence. Instead, it would function like a lens: invisible, useful only in what it enables people to see. This pursuit of a pure linguistic mirror faces significant challenges. Reality is not orderly or consistent, and reflecting it truthfully requires a tolerance for contradiction and chaos. The language must not become a new ideology under the guise of honesty. It must resist the impulse to impose meaning or assert authority. Instead, it must allow for meaning to arise, however fragmented or unstable, from the interaction between the speaker, the context, and the subject at hand. This brings us to a deeper truth: even the most honest language is still a fiction. All language is metaphor—a constructed system of symbols standing in for things it can never truly embody. When people say 'grief' or 'truth', they are not encountering those things directly but accessing culturally filtered, subjectively shaped interpretations. Language is not a mirror of nature or self but a tool of projection and construction. It organises experience, filters perception, and enables people to act as if they share a world they can name. Yet, within this fiction lies an unexpected truth. Every utterance is true in the sense that it reflects the subjective state of the one who speaks. It may be incomplete, biased, or deluded—but it is always a manifestation of someone’s inner world. The linguistic mirror, therefore, reflects not objective reality but the layered reality of human subjectivity. This does not negate its value. On the contrary, it reveals how deeply language is woven into the human condition: not as a means of uncovering absolute truth, but as a framework for navigating the flux of being. Toward a linguistic mirror means not abandoning language’s artifice but understanding it. It means using language not to conquer or comfort, but to see—without adornment, without denial. This is not a call for silence, nor for sterile precision, but for a radical kind of honesty. Language cannot stop being fiction, but it can begin to be aware of its fictionality. It can become a disciplined reflection—not a painting of what should be, but a lens focused on what is. What design principles, research methods, and ethical commitments are needed to craft a meta-language that acts as a disciplined mirror? We should start with acknowledging its fictionality, embracing ambiguity and resisting manipulation.

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